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Greenhouse Gas Emissions from Private Vehicles in Canada, 1990 to 2007

by Berouk Terefe

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Greenhouse Gas Emissions from Private Vehicles in Canada, 1990 to 2007

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.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published

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Highlights

- Greenhouse gas emissions (GHG) from private vehicle operation reached 70,774 kilotonnes (kt) of CO_2 equivalent (eq) in 2007, an increase of 3% from the 2006 level.
- Compared to the 1990 emissions level of 52,256 kt, emissions in 2007 have gone up 35%, almost twice the growth rate of population (19%) during the same period.
- Among the three greenhouse gases that are emitted by vehicles, carbon dioxide (CO_2) accounted for 98%, while methane (CH_4) and nitrous oxide (N_2O) accounted for the balance.
- In 2005, the year for which the most recent published data are available for total household emissions, the share of private vehicle GHG emissions was 63%, almost eight percentage points higher than its share in 1990.
- The most significant drop (1,120 kt) in the year-over-year growth of emissions since 1990 was recorded for 1991. The three most significant year-over-year increases during the 1990–2007 period happened in 1998, 2002 and 2007.
- Every dollar of personal expenditure on motor fuels generated 3.2 kilograms (kg) of vehicle emissions in 2007. In other words, GHG intensity (the proportion of household vehicle emissions to household expenditure on motor fuels) was 3.2 kg in 2007, essentially unchanged from the 2006 level.
- Canada's per capita GHG emissions from private vehicles reached 2,149 kg in 2007. This was 2% higher than 2006, but 14% higher than the 1990 level of 1,887 kg per capita.
- In 2007, households with annual income of $20,000 to $49,999 (lower middle income) contributed the most to vehicle emission levels, accounting for 35% (19,858 kt) of the total. This was mainly because of the size of the population of the group (31%), the largest of all the income groups.
- While representing only 19% of the population, high-income households (households with annual income of $100,000 and over) had the highest per capita emissions in 2007, generating 5,737 kg of GHG per capita.
- Private vehicles in Ontario emitted 22,384 kt of GHGs from the combustion of gasoline and diesel in 2007, the highest of all the provinces. Quebec, Alberta and British Columbia followed with 12,274 kt, 7,073 kt, and 6,802 kt respectively. Prince Edward Island had the lowest emissions, at 251 kt.
- On a per capita basis, Saskatchewan led with 2,184 kg per capita followed by Alberta, Manitoba and Nova Scotia. All four provinces were at or above the 2,000 kg per capita mark.
- Among census metropolitan areas (CMA), Toronto had the highest total emissions level of 6,760 kt. This represented 20% of the total private vehicle emissions of vehicles in all CMAs. Toronto was followed by Montréal at 4,430 kt and Vancouver at 2,599 kt. All three are large urban centres with higher numbers of private vehicles.
- Montréal had the lowest per capita emissions (1,219 kg) among CMAs, mostly the result of the composition of its fuel-efficient fleet, both in terms of vehicle model year and body type.
- Kingston and Greater-Sudbury were among the CMAs with the highest per capita emissions, at 3,035 kg per capita and 2,844 kg per capita respectively.

Greenhouse Gas Emissions from Private Vehicles in Canada, 1990 to 2007

by Berouk Terefe

1 Introduction

Rising concerns about climate change and the ensuing debate on how best to control GHG emissions has given rise to a need for timely and robust statistics on current GHG emissions.

The development of environmental policies, such as those that target the reduction of GHG emissions, require timely data on key environmental statistics. These can be GHG estimates by type of greenhouse gas and mode of transportation, as well as by geographic regions and sub-regions, among others.

The transportation sector in Canada is a significant emitter of GHGs. According to Environment Canada, in 2007 transportation was responsible for 27% (200,000 kt of CO_2 eq) of the total GHG emissions (747,000 kt of CO_2 eq). Road transportation accounted for 69% (137,000 kt of CO_2 eq) of the GHG emissions within the sector.[1]

In light of the fact that this sector plays such a large role in total emissions, it is important to have some key statistics to measure emissions from a number of different perspectives. Estimates by type of fuel, mode of transportation and the purpose of vehicle use are examples of data that would be useful in informing policy decisions.

> The main types of greenhouse gasses produced by the combustion of fuels in vehicles are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).
>
> Globally, the road transport sector is responsible for 74% of global CO_2 emissions, while aviation, shipping and railways account for 12%, 10%, and 4% of transportation emissions respectively (Rodrigue et al., 2006).

In addition, many transportation-related policies are made locally by provinces and cities. Therefore, locally relevant vehicle emission statistics should be available at these geographic levels in order to better target policy instruments.

In response to data needs in the area of environmental statistics, the sample size of the Canadian Vehicle Survey (CVS) was expanded following consultations with the funding partners of the CVS, Transport Canada and Natural Resources Canada. The expansion in sample size allowed for a finer level of geographic analysis of the results. These have been used in this study to produce the first survey-based vehicle emission estimates for the provinces and census metropolitan areas (CMAs).

To these ends, this study presents estimates of the level of greenhouse gas emissions arising from households' private vehicle operation for the period 1990 to 2007. The results provide activity-specific estimates of the household sector's greenhouse gas emissions at a national level. That is, motor fuel consumption for the purpose of private vehicle operation. The study also explores the regional distribution of GHG emissions from private vehicle operation, presenting emission estimates for the provinces and CMAs.

Although a household's transportation energy demands and the corresponding emissions have direct and indirect components, the results in this study represent only emissions related to vehicle operation, a household's direct transportation energy demand. Emissions related to indirect energy demand are not part of this study.

1 The figures were obtained from the Canadian Government's Submission to the UN Framework Convention on Climate Change. Environment Canada. 2009. *National Inventory Report. Greenhouse Gas Sources and Sinks in Canada, 1990-2007*. Ottawa.

Examples of indirect energy use related to the transportation sector include: emissions from transportation energy production, distribution and trade; emissions related to the manufacture, maintenance and disposal of private vehicles; their transportation infrastructure, construction and maintenance; and, administration of the transport business. These are all out of the scope of this study.

The next section presents a detailed discussion of the results of the study followed by a conclusion. The first part of the results section focuses on the period 1990 to 2007, outlining GHG emissions from the consumption of motor fuel by Canadian households. This part of the study does not distinguish between the type of on-road vehicles operated by households. The results are presented at the national level only.

The second part of the analysis is focused on a narrowly defined sub-population and the most recent reference year (2007). It presents the 2007 GHG emissions estimates from a cross-sectional perspective, profiling consumption of gasoline and diesel fuel used for light vehicles operated by households for personal use.[2] The results provide regional estimates of emissions for provinces and cities (2006 census metropolitan areas).[3] Finally, some concluding remarks and a note on future directions are presented.

Included in the appendices are discussion on the study's data sources and methodology, a comparison of methodological applications with Environment Canada's (EC) National Inventory Report (NIR), a summary on Material and Energy Flow Accounts (MEFA), a comparison of emission estimates with the NIR and questionnaires of the Canadian Vehicle Survey (CVS).

2 Results

2.1 Canada's greenhouse gas emissions from private motor vehicles, 1990 to 2007

GHG emissions from private vehicle operation reached 70,774 kt of CO_2 equivalent (kt of CO_2 eq)[4] in 2007, up 3% from the 2006 level (Chart 1). Compared with the 1990 level of 52,256 kt, emissions have gone up 35%, almost twice the growth rate of Canada's population (19%) during the same period (Table 3).

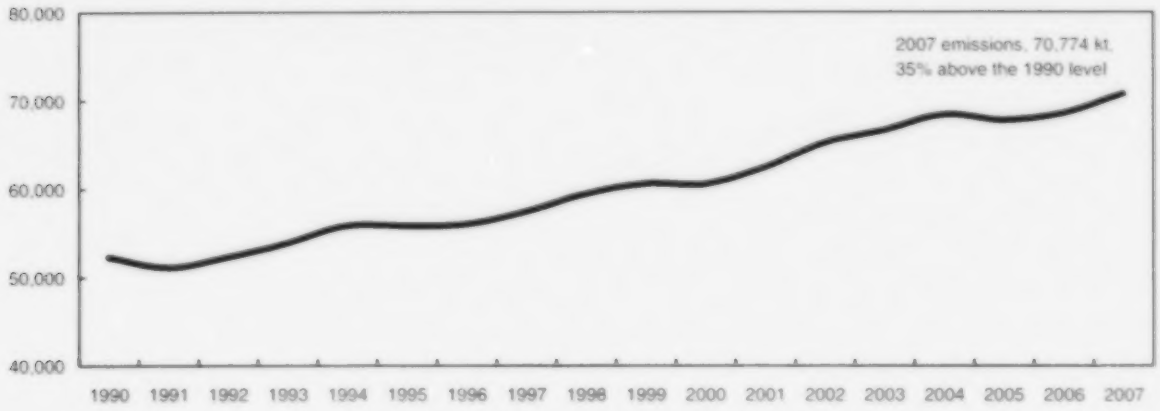
Among the three greenhouse gasses that are emitted by vehicles, carbon dioxide (CO_2) accounted for 98% while methane (CH_4) and nitrous oxide (N_2O) accounted for the balance (Table 1). In 2005, the year for which the most recent published data were available for total household emissions, the share of private vehicle GHG emissions was 63%. That is almost eight percentage points higher than its share in 1990.

2 According to the weight classification created for the Canadian Vehicle Survey (CVS), based on the information available on the vehicle registration list, vehicles classified as light vehicles are those with gross vehicle weights below 4.5 tonnes. For more information on definitions of vehicle characteristics, see Statistics Canada. 2009. *Canadian Vehicle Survey, Annual, 2008*. Catalogue no. 53-223-X.

3 The regional estimates are not available for the three territories as the microdata required to compute GHG emissions were not available from the CVS.

4 Unless explicitly stated otherwise, all emission estimates given in kt, kg or g represent emissions of GHGs in kt of CO_2 eq, kg of CO_2 eq or g of CO_2 eq, respectively. Emissions are aggregated and expressed as CO_2 equivalent using an index known as global warming potential (GWP). GWP measures the heat-trapping potential of each greenhouse gas. See "Appendix A – Data and methodology" for further explanation.

Chart 1
Total greenhouse gas emissions from private vehicle operation



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

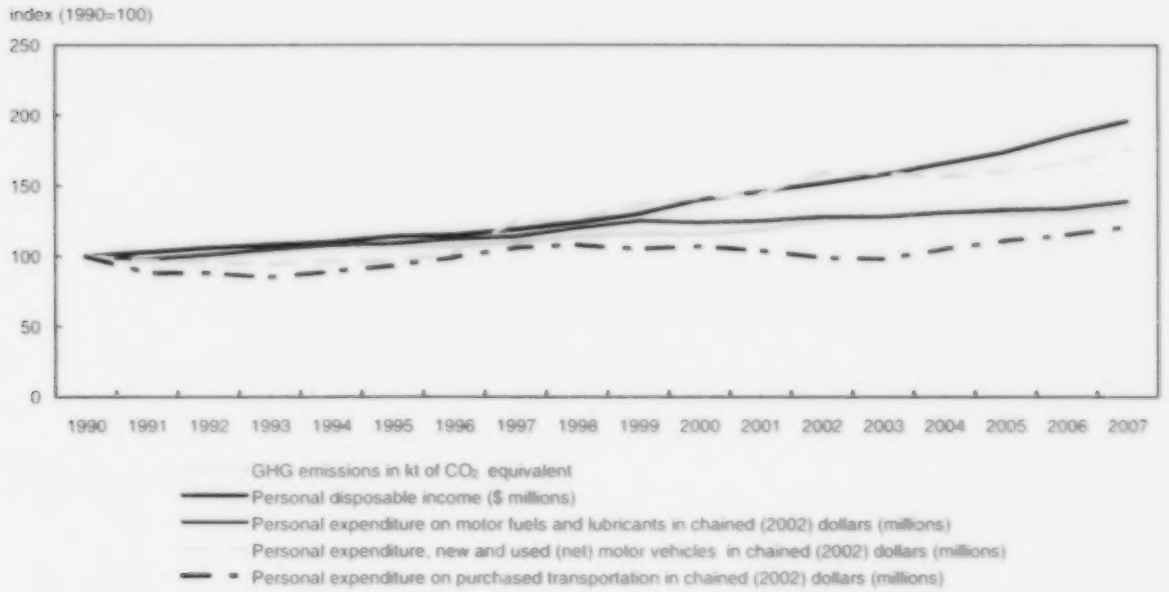
The highs and lows of vehicle emission levels during the period were for the most part consistent with the energy consumption of household vehicles during the period. This, in turn, is affected by factors such as changes in the price of transportation fuel, household demand for motor vehicles which affects the size and composition of the motor vehicle fleet and its fuel efficiency, the distances driven, changes in real income level, and the demand for alternative modes of transportation.

The most significant decline (1,120 kt) in the year-over-year growth of emissions was recorded for 1991 (Table 1). This was a period of decline in fuel consumption, associated with higher energy prices and a drop in real expenditures on motor fuels due to recessionary pressures at the time (Chart 2).[5] The second and less significant drop (622 kt) in emissions in 2005 was in line with the softer growth (compared to the previous year) in fuel consumption and higher fuel prices during that period.[6]

5 In 1991 the Canadian economy was in the midst of a recession. For more information see Cross, P., 2001, "Tracking the business cycle: monthly analysis of the economy at Statistics Canada, 1926-2001,"*Canadian Economic Observer*, December, Statistics Canada Catalogue no. 11-010-X, Vol. 14 no.12.

6 Statistics Canada, CANSIM table 326-0021, *Consumer price index (CPI)*.

Chart 2
Index of indicators and private vehicle emissions level



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

The three most significant year-over-year increases during the period happened in 1998, 2002 and 2007. The increase in 1998 was associated with one of the three lowest gasoline prices during the entire period under study.[7] The increase in 2002 happened in the context of increasing personal disposable income, a significant rise in personal expenditure on new cars (11%, the highest since 2000) resulting in a higher number of less fuel-efficient vehicles in operation, and longer distances travelled given relatively lower gasoline prices.[8]

During the same year, there were 39,863 (11%) more station wagons and 479,877 (19%) more pickup trucks in operation. Distances travelled by these two types of vehicles increased by 1.8 billion km (33%) and 9 billion km (20%), respectively. The total distance driven by all light vehicles in that year was 290.3 billion km, up 2% from the year before.[9]

The 2007 increase in emission levels took place despite rising gasoline prices. Higher disposable income and significant increases in expenditure on motor vehicles and motor fuels by households were followed by an increase of 466,472 new motor vehicles on the road.[10]

Over half of this additional fleet consisted of less fuel-efficient vehicles such as sport utility vehicles (SUVs), vans and straight trucks. During the same year SUVs were the only vehicle that saw a year-over-year increase in the number of kilometres travelled (12,245 billion km).[11]

7. *Ibid.*
8. Statistics Canada, CANSIM table 405-0063, *Canadian Vehicle Survey*.
9. *Ibid.*
10. *Ibid.*
11. *Ibid.*

2.2 Every dollar of personal expenditure on motor fuels generated 3.2 kg of vehicle emissions

Every dollar of personal expenditure on motor fuels generated 3.2 kilogram of vehicle emissions in 2007. This is alternatively expressed in this study as GHG intensity, which is defined as GHG emissions from private vehicle operation divided by households' expenditure on motor fuels measured in constant dollar expenditure, chained 2002 dollars. GHG intensity remained essentially unchanged from the 2006 level (Table 2).

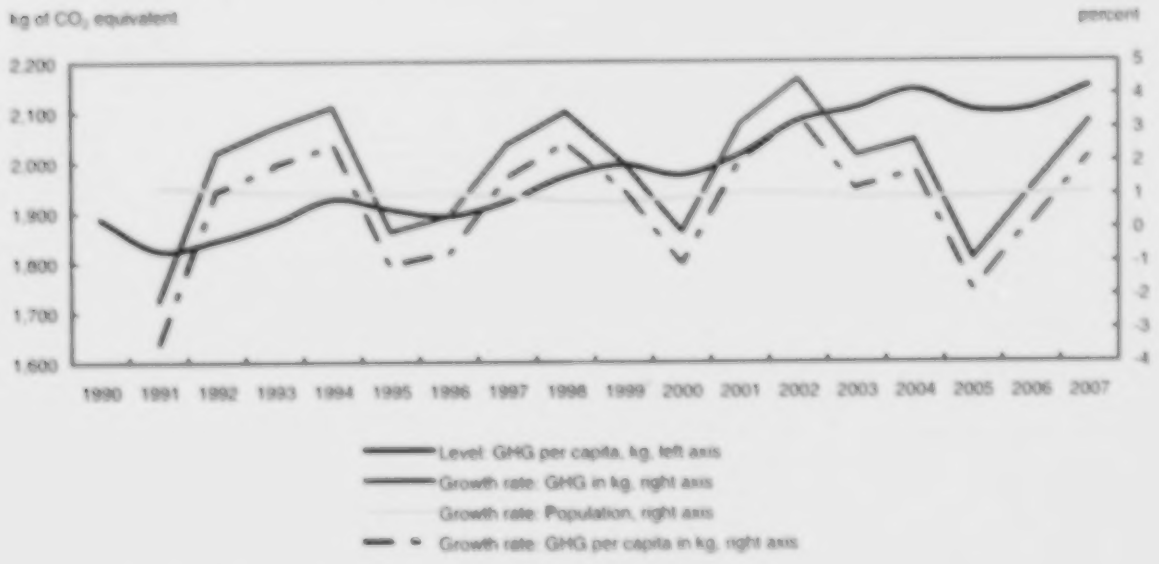
GHG intensity reached its peak of 3.3 kg in 2004, the same level of intensity recorded for 1990. It should be noted that the peak in 2004 appeared to be the highest despite the significantly higher increases in GHG emission levels in 1998, 2002 and 2007. Intensity levels were offset in these years by relatively higher growth in household expenditures on motor fuels.

2.3 Per capita emissions from private vehicles remains high

Canada's per capita GHG emissions reached 2,149 kg in 2007 (Table 3). This was 2% higher than 2006 but 14% higher than the 1990 level of 1,887 kg per capita. The growth in per capita emissions during the 17-year period was mainly attributable to the growth in emission levels, as the otherwise offsetting population growth rate remained relatively flat over the same period.

During this period, emission levels grew 35% (Chart 3), almost twice the growth rate of population, which was up only 19%. It should be noted that every single individual is not operating a vehicle in Canada and thus not contributing to emission levels. Therefore, these per capita emissions figures should be interpreted with some caution. They are used in this study to factor out differences in population levels between geographic regions.

Chart 3
Per capita greenhouse gas emissions level from private vehicles



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

2.4 Lower-middle income households had the highest total vehicle emissions[12]

In 2007, households with annual income of $20,000 to $49,999 (lower-middle income households) contributed the most to vehicle emission levels, accounting for 35% (19,858 kt) of the total (Table 4). Emissions attributed to this income group were highest mainly because of the share of its population (31%), which was the largest of all the income groups.[13]

Additionally, people in this income group are less likely to be able to finance the acquisition and maintenance of newer and more fuel-efficient vehicles, making them dependent on an older fleet with inferior fuel efficiency and higher GHG emissions.[14]

Since March 2007 the Federal Government has offered the ecoAUTO rebate program on a list of qualifying vehicles to encourage Canadians to buy new fuel-efficient vehicles as part of a plan for reducing vehicle emissions.[15]

Using data from the Survey of Household Spending (SHS) and information from Transport Canada's website on the ecoAUTO rebate program and the list of qualifying vehicles, average household expenditure on the purchase of motor vehicles was compared to the annual expenditure required for the acquisition of these vehicles.[16]

The comparison revealed some affordability gaps. In 2007, the group with the highest total emissions (the lower-middle income group) spent only $1,379 on average while the estimated annual expenditure required for the acquisition of the most fuel-efficient vehicle was over $6,000 a year, after factoring the ecoAUTO rebate. This rebate was the highest in 2007.

Acquisition of a comparable vehicle that's relatively less fuel efficient but among the least expensive on the list, required an estimated average expenditure of $3,000 a year, after factoring the $1000 ecoAUTO rebate.[17]

Middle-income households ($50,000 to $79,999) contributed 26% of total emissions (14,886 kt), while high-income households ($100,000 and over) contributed 24% (13,757 kt).

2.5 High-income households had the highest per capita emissions

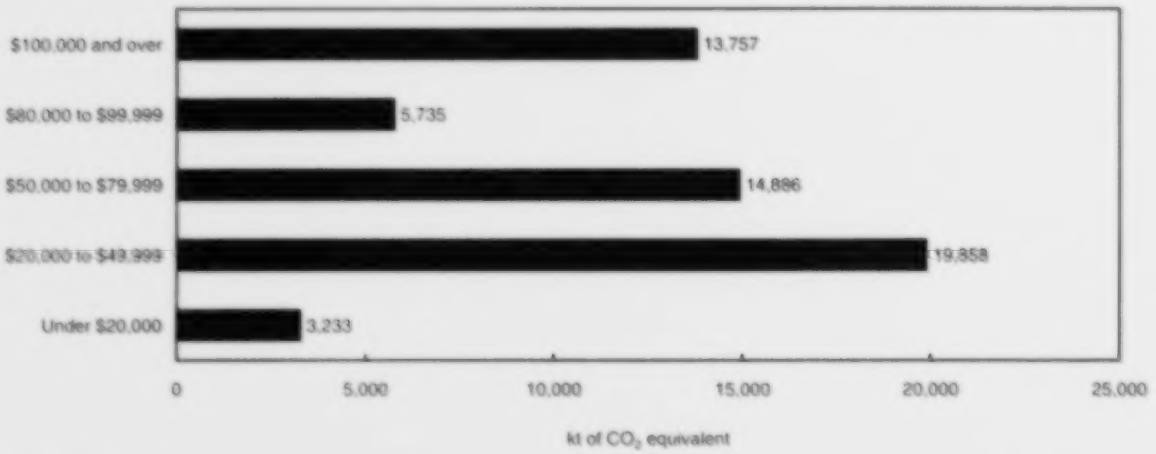
While representing only 19% of the population, high-income households had the highest per capita emissions in 2007, generating 5,737 kg of GHG per capita (Table 4). This amount was significantly higher than the per capita emissions of 5,102 kg recorded for the lower-middle income group, which was the group with the highest total emissions. In other words, an individual with a private vehicle in a high-income household produced 635 kg more emissions per year than one in a lower-middle income household and 4,031 kg more than one in a low-income household. People in the high-income group were more likely to own less fuel-efficient types of vehicles, such as trucks and sport utility vehicles (SUVs).

According to the Survey of Household Spending, high-income households' average annual expenditure on the purchase of motor vehicles in 2007 was $5,611. The annual vehicle purchase budget of this group was within the range of the required annual expenditure for the acquisition of almost any one of the vehicles eligible for the ecoAUTO rebate.

However, whether or not these vehicles meet the personal preferences such as performance, interior features, and other technical requirements of this income group remains an essential question to be addressed by car makers.

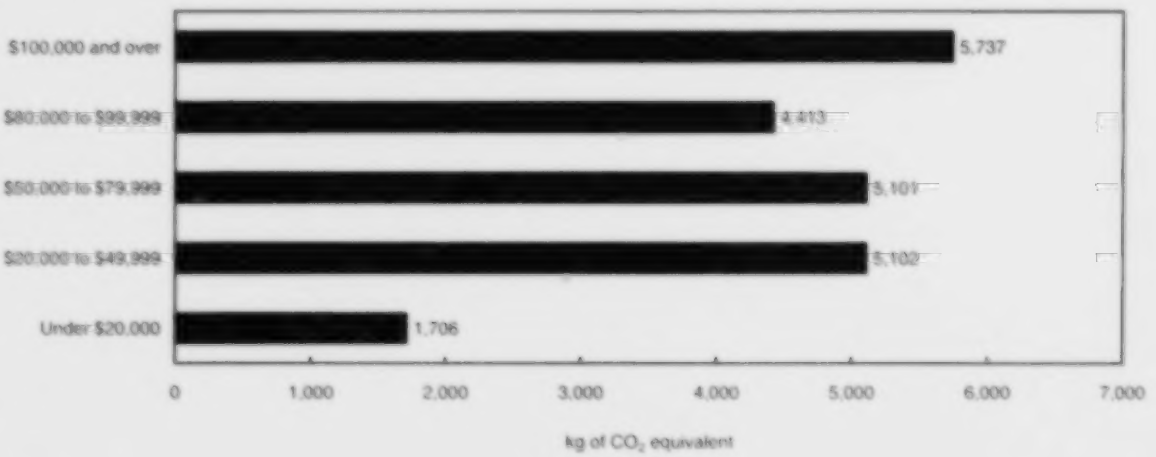
12. It should be reiterated that, the results discussed from this point on do not include the three territories and focus only on a narrowly defined vehicle population. That is, light vehicles (vehicles up to 4.5 tonnes), that are gasoline or diesel operated and privately owned.
13. Statistics Canada, 2006 Census of Population, Catalogue no. 97-563-XCB2006045.
14. Information on the age and body type of vehicles, as well as their fuel consumption is obtained from the CVS. The survey sample is drawn quarterly from vehicle registration lists provided by the provincial and territorial governments.
15. For more information on the Federal Government's ecoAuto program, visit www.ecoaction.gc.ca/ecoauto.
16. The SHS was used as data source for the average household expenditure on the purchase of motor vehicles. The data were compiled for each income group shown in Table 4. The numbers do not include the three territories.
17. The required annual expenditure for the acquisition of the vehicles eligible for the ecoAUTO rebate of 2007 was estimated based on Suggested Retail Price (SRP) obtained from the *Canadian Red Book* for December 2007. For the purpose of maintaining uniformity in price that is comparable across provinces and dealerships, provincial sales taxes and miscellaneous charges and fees imposed by dealers have been excluded. Assuming an interest free five-year term and no down payment, the SRP with GST included, net of ecoAUTO rebate was allocated over a five-year term.

Chart 4
Private vehicle emissions by income group, 2007



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Chart 5
Private vehicle per capita greenhouse gas emissions by income group, 2007



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

2.6 Households in Ontario had the highest total vehicle emission levels

Households in Ontario released 22,384 kt of vehicle emissions from the combustion of gasoline and diesel to the atmosphere in 2007, the highest of all the provinces (Table 5). Quebec, Alberta and British Columbia followed with 12,274 kt, 7,073 kt, and 6,802 kt respectively. Prince Edward Island had the lowest emissions, at 251 kt.

GHG emissions in Ontario and Quebec represented 39% and 21% of total provincial emission levels, respectively. This was in line with the provincial distribution of light vehicle population where the fleet in Ontario made up 37% and in Quebec 23% of the total number of light vehicles in all the provinces.

2.7 Per capita private vehicle emissions highest in Saskatchewan

Saskatchewan recorded the highest per capita vehicle emissions, with 2,184 kg per capita, followed by Alberta, Manitoba and Nova Scotia. All four provinces were at or above the 2,000 kg per capita mark (Table 5). These provinces were also significantly higher than the overall total provincial per capita level of 1,751 kg. All the remaining provinces were below 2,000 kg per capita, including Ontario at 1,750 kg per capita, close to the total per capita estimate for all provinces.

Although the provincial differences in per capita emissions are not great, the relatively higher figures in Saskatchewan and Alberta are consistent with the high per capita car ownership of each of the two provinces (60%, the highest of all the provinces).[18]

Additionally, fleet composition plays a role in the increased emissions. In Saskatchewan, the oldest vehicle group made up the largest share (27%) of the stock of light vehicles. These are vehicles of model years of 1993 and earlier that have become less fuel-efficient with age than newer cars.[19]

In Alberta, a combination of factors such as the composition of age and body type of vehicles resulted in lower fuel efficiency and therefore higher emissions. In 2007, the oldest vehicle group (model years 1993 and earlier) made up 20% of the fleet. About 58% of the light vehicle stock consisted of station wagons, vans, SUVs, pickups and straight trucks, vehicles that are relatively less fuel efficient.[20]

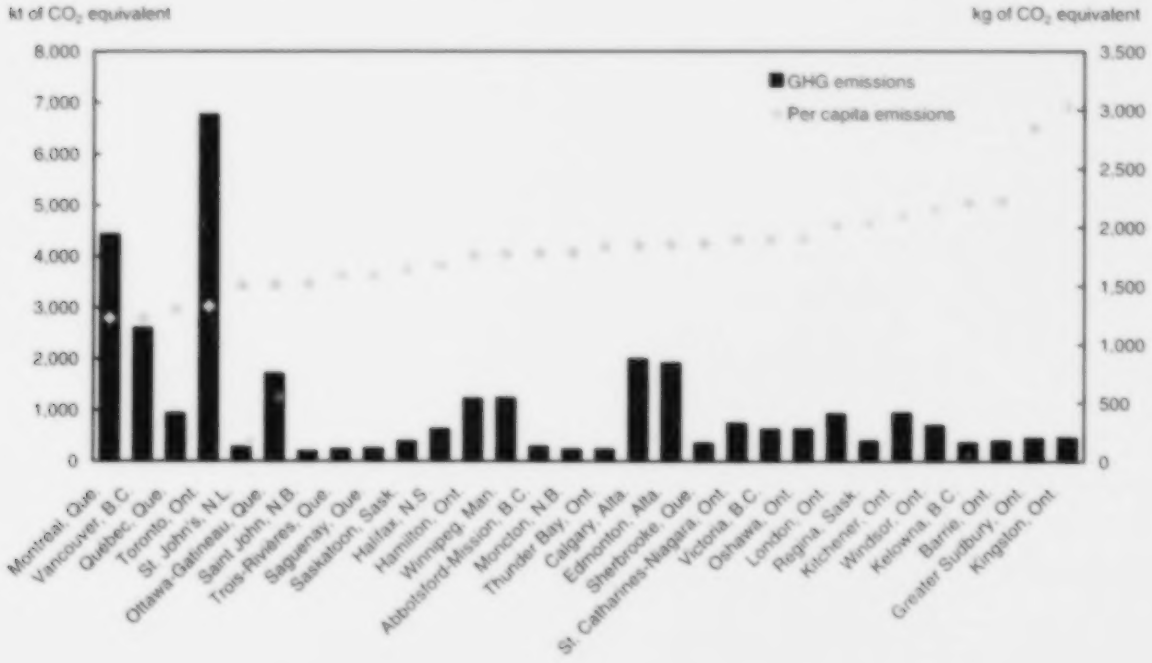
2.8 Toronto had the highest total emissions

Among census metropolitan areas, Toronto had the highest emissions at 6,760 kt, representing 20% of the total private vehicle emissions of CMAs. It was followed by Montréal at 4,430 kt and Vancouver at 2,599 kt (Table 6).

Large urban centres have higher private vehicle populations and hence have higher emission levels. This is also consistent with the provincial distribution of privately owned and used diesel and gasoline-operated light vehicle populations, where Ontario, Quebec, British Columbia and Alberta, provinces with larger cities, rank at the top (Table 5).

18. The per capita car ownership was calculated using CVS data on light vehicle population owned by the personal sector and provincial population estimates from CANSIM.
19. These percentages were derived from CVS data.
20. The percentages were calculated using data from the Canadian Vehicle Survey.

Chart 6
Private vehicle greenhouse gas emissions level and per capita emissions by census metropolitan area



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

2.9 Montréal had Canada's lowest per capita vehicle emissions, Kingston the highest

Montréal had the lowest per capita vehicle emissions (1,219 kg) among CMAs (Table 6). This was due likely to a more fuel-efficient fleet composition, both in terms of vehicle model year and body type. Montreal also has an extensive public transit system, potentially reducing the need for personal vehicle use amongst its populace.[21]

Out of the 32 CMAs studied, three others were below the 1,500 kg per capita mark: Vancouver (1,228 kg), Quebec City (1,297 kg), and Toronto (1,322 kg). Again, these have relatively more fuel efficient fleet of vehicles.[22]

On the other hand, Kingston and Greater-Sudbury at 3,035 kg and 2,844 kg per capita respectively, were among the CMAs with the highest per capita emissions (over 2,500 kg per capita). This suggests a vehicle fleet that is less fuel efficient, either due to a large number of heavier body types, such as SUVs and trucks, or a greater number of older vehicles in operation, or both. Other factors such as lower urban population density, the availability and the use of public transit also play roles.

There were wide variations among the per capita estimates of CMAs (Map 1). Emission reduction targets of a higher emitting CMA to the national CMA average would differ widely.[23] For example, in order to reduce the per capita emissions of those CMAs with per capita emissions over 1,900 kg to a target of 1,549 kg—the national CMA

21 According to the 2006 Households and the Environment Survey, Montreal was the CMA with the lowest percentage (75%) of households owning or leasing a motor vehicle for personal use.

22 Respondents to the Canadian Vehicle Survey are asked to identify their vehicle according to the following categories of vehicle body type: Car, station wagon, van, sport-utility vehicle, pick-up, straight truck, truck-tractor, and other. Missing or unusual responses are verified against registration lists, if available.

23 What is referred to as the national CMA average here, is the per capita emissions shown for "All census metropolitan areas" in Table 6.

average—Kingston would have to reduce its total emission levels by 49% (226 kt) and Greater-Sudbury by 46% (205 kt).[24]

3 Conclusion

The findings from the national emissions analysis indicate that, at the national level, emissions from private motor vehicle operations are on the rise and significantly higher than the 1990 level. In 2005, personal vehicle use accounted for nearly two-thirds (63%) of total household emissions, while per capita vehicle emissions increased at almost twice the growth rate of population between 1990 and 2007.

Findings also show that lower-middle income Canadians (as a group) contributed the highest vehicle GHG emissions. This was likely a result of the lack of fuel efficiency of the type of vehicles they drove, mainly due to the age of the vehicle fleet.

Canadians in the highest income bracket were more likely to drive less fuel-efficient types of vehicles, such as trucks and SUVs, and had the highest emissions on a per capita basis compared with other income brackets.

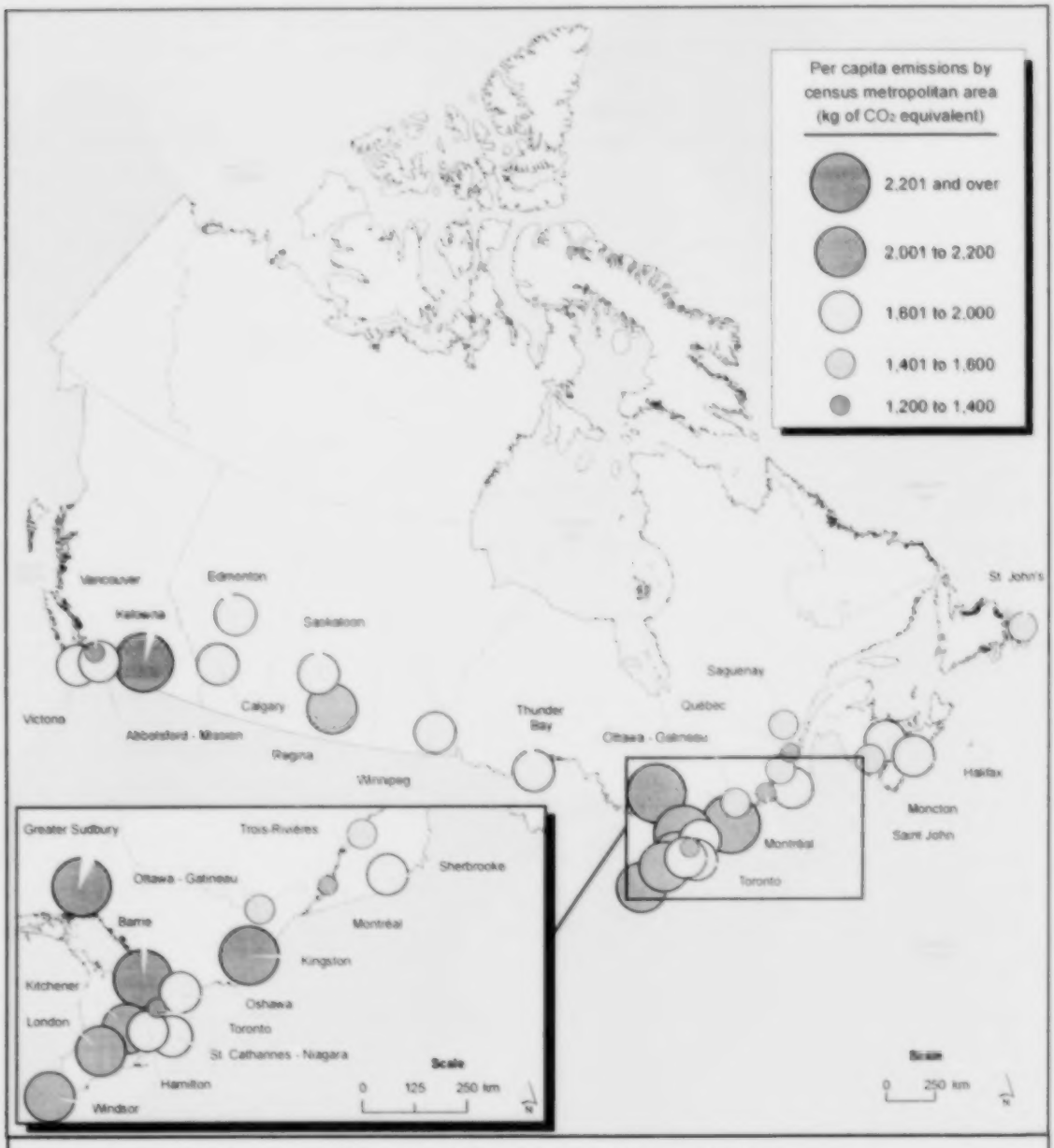
With respect to the regional concentration of private vehicle emissions from diesel and gasoline-operated vehicles, the results indicate that despite the significantly higher total levels of emissions in Ontario, Quebec, and British Columbia, the major CMAs in these provinces have the lowest per capita emissions among all the CMAs.

This can be attributed to the composition of their more fuel-efficient fleet. On the other hand, the study also revealed wide variations among the CMAs. The per capita vehicle emissions of Kingston and Greater-Sudbury were the highest of all CMAs.

Further research might include expanding the scope of the study to incorporate the territories, as well as to provide estimates for the most recent reference year based on data for all fuel types used by on-road vehicles.

24. Assuming population levels, consumer preferences and technology are held constant.

Map 1
Greenhouse gas emissions per capita from private vehicle operation, 2007



Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Table 1
Greenhouse gas emissions from private vehicle operation, by type of gas, Canada

	1990	1991	1992	1993	1994	1995	1996	1997	1998
	kt of CO_2 equivalent								
Greenhouse gas (GHG) emissions level									
Carbon dioxide (CO_2)	51,096	50,011	51,157	52,712	54,629	54,584	54,799	56,172	58,129
Methane (CH_4)	64	66	67	67	70	71	68	69	70
Nitrous oxide (N_2O)	1,095	1,059	1,083	1,119	1,159	1,154	1,156	1,196	1,241
GHG emissions	**52,256**	**51,136**	**52,307**	**53,897**	**55,857**	**55,808**	**56,023**	**57,437**	**59,439**
	kt of CO_2 equivalent								
Changes in GHG emissions level									
Carbon dioxide (CO_2)		-1,085	1,146	1,555	1,917	-45	206	1,383	1,956
Methane (CH_4)		1.2	1.8	0.4	2.4	1.6	-3.4	1.0	1.0
Nitrous oxide (N_2O)		-35.3	23.9	35.5	40.1	-5.1	12.5	30.0	44.7
GHG emissions	..	**-1,120**	**1,171**	**1,591**	**1,960**	**-49**	**215**	**1,414**	**2,002**
	percent								
Rate of growth of emissions level									
Carbon dioxide (CO_2)		-2.12	2.29	3.04	3.64	-0.08	0.38	2.52	3.48
Methane (CH_4)		1.96	2.81	0.65	3.64	2.29	-4.73	1.41	1.42
Nitrous oxide (N_2O)		-3.32	2.25	3.28	3.59	-0.44	1.08	2.58	3.74
GHG emissions	..	**-2.14**	**2.29**	**3.04**	**3.64**	**-0.09**	**0.38**	**2.52**	**3.49**
	percent								
Percentage contribution of gases									
Carbon dioxide (CO_2)	97.78	97.80	97.80	97.80	97.80	97.81	97.80	97.80	97.80
Methane (CH_4)	0.12	0.13	0.13	0.12	0.12	0.13	0.12	0.12	0.12
Nitrous oxide (N_2O)	2.10	2.07	2.07	2.08	2.07	2.07	2.08	2.08	2.09
GHG emissions	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**
	kt of CO_2 equivalent								
Change in GHG emissions level since 1990									
Carbon dioxide (CO_2)		-1,085	60	1,615	3,533	3,487	3,693	5,076	7,032
Methane (CH_4)		1	3	4	6	6	4	5	6
Nitrous oxide (N_2O)		-36	-12	23	63	58	71	101	145
GHG emissions	..	**-1,120**	**51**	**1,642**	**3,602**	**3,553**	**3,768**	**5,182**	**7,184**
	percent								
Growth rate of GHG emissions since 1990									
Carbon dioxide (CO_2)		-2.12	0.12	3.16	6.91	6.82	7.23	9.93	13.76
Methane (CH_4)		1.96	4.83	5.51	9.36	11.67	6.57	8.08	9.61
Nitrous oxide (N_2O)		-3.32	-1.14	2.11	5.77	5.30	6.44	9.19	13.27
GHG emissions	..	**-2.14**	**0.10**	**3.14**	**6.89**	**6.80**	**7.21**	**9.92**	**13.75**
Share of total household GHG emissions									
Total household GHG emissions (kt)	95,000	92,600	95,200	99,500	102,400	100,900	105,800	104,000	100,100
Household's private vehicle emissions (kt)	52,256	51,135	52,307	53,897	55,857	55,808	56,023	57,437	59,439
Household's private vehicle emissions as a share of total (percent)	55.0	55.2	54.9	54.2	54.5	55.3	53.0	55.2	59.4

Table 1 – continued

Greenhouse gas emissions from private vehicle operation, by type of gas, Canada

	1999	2000	2001	2002	2003	2004	2005	2006	2007
	kt of CO_2 equivalent								
Greenhouse gas (GHG) emissions level									
Carbon dioxide (CO_2)	59,273	59,219	61,064	63,787	65,168	66,891	66,284	67,159	69,380
Methane (CH_4)	70	69	71	74	75	77	77	79	80
Nitrous oxide (N_2O)	1,269	1,269	1,309	1,367	1,399	1,435	1,420	1,345	1,314
GHG emissions	**60,612**	**60,557**	**62,444**	**65,229**	**66,642**	**68,403**	**67,781**	**68,584**	**70,774**
	kt of CO_2 equivalent								
Changes in GHG emissions level									
Carbon dioxide (CO_2)	1,144	-54	1,845	2,723	1,381	1,723	-607	875	2,221
Methane (CH_4)	0.0	-0.9	2.1	3.4	0.4	2.2	0.1	2.2	0.8
Nitrous oxide (N_2O)	28.0	0.5	39.7	58.5	31.7	35.6	-14.8	-74.6	-31.6
GHG emissions	**1,172**	**-55**	**1,887**	**2,785**	**1,413**	**1,760**	**-622**	**803**	**2,190**
	percent								
Rate of growth of emissions level									
Carbon dioxide (CO_2)	1.97	-0.09	3.12	4.46	2.17	2.64	-0.91	1.32	3.31
Methane (CH_4)	-0.06	-1.23	3.06	4.74	0.56	2.94	0.13	2.85	1.04
Nitrous oxide (N_2O)	2.25	0.04	3.13	4.47	2.32	2.54	-1.03	-5.25	-2.35
GHG emissions	**1.97**	**-0.09**	**3.12**	**4.46**	**2.17**	**2.64**	**-0.91**	**1.18**	**3.19**
	percent								
Percentage contribution of gases									
Carbon dioxide (CO_2)	97.79	97.79	97.79	97.79	97.79	97.79	97.79	97.92	98.03
Methane (CH_4)	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.11
Nitrous oxide (N_2O)	2.09	2.10	2.10	2.10	2.10	2.10	2.09	1.96	1.86
GHG emissions	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**
	kt of CO_2 equivalent								
Change in GHG emissions level since 1990									
Carbon dioxide (CO_2)	8,177	8,122	9,968	12,691	14,072	15,795	15,188	16,063	18,284
Methane (CH_4)	6	5	7	11	11	13	13	16	16
Nitrous oxide (N_2O)	173	174	214	272	304	339	325	250	218
GHG emissions	**8,356**	**8,301**	**10,188**	**12,973**	**14,387**	**16,147**	**15,526**	**16,328**	**18,519**
	percent								
Growth rate of GHG emissions since 1990									
Carbon dioxide (CO_2)	16.00	15.90	19.51	24.84	27.54	30.91	29.72	31.44	35.78
Methane (CH_4)	9.54	8.19	11.51	16.80	17.44	20.89	21.05	24.50	25.79
Nitrous oxide (N_2O)	15.82	15.86	19.49	24.83	27.73	30.96	29.63	22.82	19.93
GHG emissions	**15.99**	**15.89**	**19.50**	**24.83**	**27.53**	**30.90**	**29.71**	**31.26**	**35.44**
Share of total household GHG emissions									
Total household GHG emissions (kt)	103,100	104,800	103,500	107,800	110,800	110,300	108,400		
Household's private vehicle emissions (kt)	60,612	60,557	62,444	65,229	66,642	68,403	67,781		
Household's private vehicle emissions as a share of total (percent)	58.8	57.8	60.3	60.5	60.1	62.0	62.5		

Note(s): CO_2 equivalent emissions are the weighted sum of all greenhouse gas emissions. The following global warming potentials were used as weights: CO_2=1; CH_4 = 21; N_2O = 310.

Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation, Catalogue no. 16-201-X20060009515.

Table 2
Greenhouse gas emissions intensity from households' private vehicle operation, Canada

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Greenhouse gas (GHG) emissions (kt of CO_2 equivalent)	52,256	51,135	52,307	53,897	55,857	55,908	56,023	57,437	59,439
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	15,836	15,581	16,035	16,616	17,106	17,209	17,749	17,991	18,980
GHG intensity (kg of CO_2 equivalent per dollar)	3.30	3.28	3.26	3.24	3.27	3.24	3.16	3.19	3.13
Year over year changes									
GHG emissions (kt of CO_2 equivalent)		-1,120	1,171	1,591	1,960	-49	115	1,414	2,002
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)		-255	454	581	490	103	540	242	989
GHG intensity (kg of CO_2 equivalent per dollar)		-0.02	-0.02	-0.02	0.02	-0.02	-0.09	0.04	-0.06
					percent				
Year over year growth rates									
GHG emissions (kt of CO_2 equivalent)		-2.14	2.29	3.04	3.64	-0.09	0.38	2.52	3.49
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)		-1.61	2.91	3.62	2.95	0.60	3.14	1.36	5.50
GHG intensity (kg of CO_2 equivalent per dollar)		-0.54	-0.61	-0.56	0.67	-0.69	-2.67	1.15	-1.91
Change since 1990									
GHG emissions (kt of CO_2 equivalent)		-1,120	51	1,642	3,602	3,553	3,768	5,182	7,184
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)		-255	199	780	1,270	1,373	1,913	2,155	3,144
GHG intensity (kg of CO_2 equivalent per dollar)		-0.02	-0.04	-0.06	-0.03	-0.06	-0.14	-0.11	-0.17
					percent				
Growth rate since 1990									
GHG emissions (kt of CO_2 equivalent)		-2.14	0.10	3.14	6.89	6.80	7.21	9.92	13.75
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)		-1.61	1.26	4.93	8.02	8.67	12.08	13.61	19.85
GHG intensity (kg of CO_2 equivalent per dollar)		-0.54	-1.14	-1.70	-1.04	-1.72	-4.35	-3.25	-5.09

	1999	2000	2001	2002	2003	2004	2005	2006	2007
GHG emissions (kt of CO_2 equivalent)	60,612	60,557	62,444	65,229	66,642	68,403	67,781	68,584	70,774
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	19,761	19,642	19,792	20,289	20,325	20,752	21,053	21,262	21,985
GHG intensity (kg of CO_2 equivalent per dollar)	3.07	3.08	3.16	3.21	3.28	3.30	3.22	3.23	3.22
Year over year changes									
GHG emissions (kt of CO_2 equivalent)	1,172	-55	1,887	2,785	1,413	1,760	-622	803	2,190
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	781	-119	140	507	36	427	301	209	723
GHG intensity (kg of CO_2 equivalent per dollar)	-0.06	0.02	0.07	0.06	0.06	0.02	-0.08	0.01	-0.01
					percent				
Year over year growth rates									
GHG emissions (kt of CO_2 equivalent)	1.97	-0.09	3.12	4.46	2.17	2.64	-0.91	1.18	3.19
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	4.11	-0.60	0.71	2.56	0.18	2.10	1.45	0.99	3.40
GHG intensity (kg of CO_2 equivalent per dollar)	-2.06	0.52	2.39	1.85	1.99	0.53	-2.33	0.19	-0.20
Change since 1990									
GHG emissions (kt of CO_2 equivalent)	8,356	8,301	10,188	12,973	14,387	16,147	15,526	16,329	18,519
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	3,925	3,806	3,946	4,453	4,489	4,916	5,217	5,426	6,149
GHG intensity (kg of CO_2 equivalent per dollar)	-0.23	-0.22	-0.14	-0.08	-0.02	0.00	-0.08	-0.07	-0.08
					percent				
Growth rate since 1990									
GHG emissions (kt of CO_2 equivalent)	15.99	15.89	19.50	24.83	27.53	30.90	29.71	31.25	35.44
Household real expenditure on motor fuels and lubricants in chained dollars (2002) (millions)	24.79	24.03	24.92	28.12	28.35	31.04	32.94	34.26	38.83
GHG intensity (kg of CO_2 equivalent per dollar)	-7.05	-6.57	-4.34	-2.57	-0.64	-0.11	-2.43	-2.25	-2.44

Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Table 3
Greenhouse gas emissions per capita from private vehicle operation, Canada

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Greenhouse gas (GHG) emissions (kg of CO_2 equivalent)	52,255,561,110	51,135,406,021	52,306,520,176	53,897,302,201	55,857,299,433	55,808,485,435	56,023,131,613	57,437,259,975	59,439,191,845
Population (number)	27,691,138	28,037,420	28,371,264	28,684,764	29,000,663	29,302,311	29,610,218	29,905,948	30,155,173
GHG emissions per capita (kg of CO_2 equivalent)	1.887	1.824	1.844	1.879	1.926	1.905	1.892	1.921	1.971
Year over year changes									
GHG emissions (kg of CO_2 equivalent)		-1,120,155,089	1,171,114,155	1,590,782,025	1,959,997,232	-48,813,998	214,646,178	1,414,128,362	2,001,931,870
Population (number)		346,282	333,844	313,500	315,899	301,648	307,907	295,730	249,225
GHG emissions per capita (kg of CO_2 equivalent)		-63	20	35	47	-21	-13	29	51
					percent				
Year over year growth rates									
GHG emissions (kg of CO_2 equivalent)		-2.14	2.29	3.04	3.64	-0.09	0.38	2.52	3.49
Population (number)		1.25	1.19	1.10	1.10	1.04	1.05	1.00	0.83
GHG emissions per capita (kg of CO_2 equivalent)		-3.4	1.1	1.9	2.5	-1.1	-0.7	1.5	2.6
Change since 1990									
GHG emissions (kg of CO_2 equivalent)		-1,120,155,089	50,959,066	1,641,741,091	3,601,738,323	3,552,924,325	3,767,570,502	5,181,698,864	7,183,630,734
Population (number)		346,282	680,126	993,626	1,309,525	1,611,173	1,919,080	2,214,810	2,464,035
GHG emissions per capita (kg of CO_2 equivalent)		-63	-43	-8	39	17	5	34	84
					percent				
Growth rate since 1990									
GHG emissions (kg of CO_2 equivalent)		-2.14	0.10	3.14	6.89	6.80	7.21	9.92	13.75
Population (number)		1.25	2.46	3.59	4.73	5.82	6.93	8.00	8.90
GHG emissions per capita (kg of CO_2 equivalent)		-3.4	-2.3	-0.4	2.1	0.9	0.3	1.8	4.5

Table 3 – continued

Greenhouse gas emissions per capita from private vehicle operation, Canada

	1999	2000	2001	2002	2003	2004	2005	2006	2007
GHG emissions (kg of CO_2 equivalent)	60,611,549,593	60,556,962,962	62,444,030,760	65,228,941,603	66,642,438,662	68,402,780,528	67,781,199,700	68,583,979,487	70,774,235,773
Population (number)	30,401,286	30,685,730	31,019,020	31,353,656	31,639,670	31,940,676	32,245,209	32,576,074	32,927,372
GHG emissions per capita (kg of CO_2 equivalent)	1.994	1.973	2.013	2.080	2.106	2.142	2.102	2.105	2.149
Year over year changes									
GHG emissions (kg of CO_2 equivalent)	1,172,357,748	-54,586,631	1,887,067,798	2,784,910,843	1,413,497,059	1,760,341,866	-621,580,828	802,779,786	2,190,256,287
Population (number)	246,113	284,444	333,290	334,636	286,014	301,006	304,533	330,865	351,298
GHG emissions per capita (kg of CO_2 equivalent)	23	-20	40	67	26	35	40	3	44
					percent				
Year over year growth rates									
GHG emissions (kg of CO_2 equivalent)	1.97	-0.09	3.12	4.46	2.17	2.64	-0.91	1.18	3.19
Population (number)	0.82	0.94	1.09	1.08	0.91	0.95	0.95	1.03	1.08
GHG emissions per capita (kg of CO_2 equivalent)	1.1	-1.0	2.0	3.3	1.2	1.7	-1.8	0.2	2.1
Change since 1990									
GHG emissions (kg of CO_2 equivalent)	8,355,988,482	8,301,401,852	10,188,469,650	12,973,380,493	14,386,877,552	16,147,219,417	15,525,638,590	16,328,418,376	18,518,674,663
Population (number)	2,710,148	2,994,592	3,327,882	3,662,518	3,948,532	4,249,538	4,554,071	4,884,936	5,236,234
GHG emissions per capita (kg of CO_2 equivalent)	107	86	126	193	219	254	215	218	262
					percent				
Growth rate since 1990									
GHG emissions (kg of CO_2 equivalent)	15.99	15.89	19.50	24.83	27.53	30.90	29.71	31.25	35.44
Population (number)	9.79	10.81	12.02	13.23	14.26	15.35	16.45	17.64	18.91
GHG emissions per capita (kg of CO_2 equivalent)	5.7	4.6	6.7	10.2	11.6	13.5	11.4	11.6	13.9

Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation

Table 4
Greenhouse gas emissions from private vehicle operation, by income group, 2007

	Greenhouse gas emissions	Distribution	Share of population [1]	Greenhouse gas emissions per capita
	kilotonnes	percent		kilograms
Household income				
Total of all provinces	**57,469**	**100**	**100**	**4,634**
Under $20,000	3,233	6	15	1,706
$20,000 to $49,999	19,858	35	31	5,102
$50,000 to $79,999	14,886	26	24	5,101
$80,000 to $99,999	5,735	10	10	4,413
$100,000 and over	13,757	24	19	5,737

1. The share of population was calculated based on Census 2006 data.
Note(s): The GHG emissions in this table represent emissions from gasoline or diesel-operated light-weight vehicles owned and operated for private purposes by the personal sector.
Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Table 5
Households' greenhouse gas emissions from private vehicle operation, by province, 2007

	Carbon dioxide (CO_2)	Methane (CH_4)	Nitrous oxide (N_2O)	GHG emissions	Provincial share of GHG	Light vehicles	Provincial share of light vehicles	Per capita emissions
	kt of CO_2 equivalent				percent	number	percent	kg of CO_2 equivalent
Total, all provinces	**56,195**	**51**	**1,213**	**57,469**	**100.0**	**17,291,578**	**100.0**	**1,751**
Newfoundland and Labrador	779	1	17	797	1.4	245,863	1.4	1,574
Prince Edward Island	246	0	5	251	0.4	71,745	0.4	1,820
Nova Scotia	1,833	2	40	1,875	3.3	493,351	2.9	2,003
New Brunswick	1,396	2	30	1,428	2.5	424,947	2.5	1,915
Quebec	12,002	13	259	12,274	21.4	4,052,562	23.4	1,597
Ontario	21,888	24	472	22,384	39.0	6,405,104	37.0	1,750
Manitoba	2,348	3	51	2,401	4.2	590,516	3.4	2,012
Saskatchewan	2,135	2	46	2,184	3.8	600,073	3.5	2,184
Alberta	6,917	8	149	7,073	12.3	2,108,249	12.2	2,015
British Columbia	6,651	7	144	6,802	11.8	2,299,167	13.3	1,578

Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Table 6
Households' greenhouse gas emissions from private vehicle operation, by census metropolitan area, 2007

	Carbon dioxide (CO_2)	Methane (CH_4)	Nitrous oxide (N_2O)	GHG emissions	Per capita emissions	GHG share of total CMA (excluding non-CMAs)
	kt of CO_2 equivalent				kg of CO_2 equivalent	percent
Total	**56,195**	**61**	**1,213**	**57,469**	...	...
St. John's, N.L.	267	0	6	273	1,507	0.8
Halifax, N.S.	610	1	13	624	1,674	1.9
Moncton, N.B.	221	0	5	226	1,787	0.7
Saint John, N.B.	182	0	4	186	1,519	0.6
Saguenay, Que.	235	0	5	241	1,587	0.7
Québec, Que.	907	1	20	928	1,297	2.8
Sherbrooke, Que.	340	0	7	348	1,861	1.0
Trois-Rivières, Que.	219	0	5	224	1,586	0.7
Montréal, Que.	4,332	5	93	4,430	1,219	13.3
Ottawa-Gatineau, Que.	1,668	2	36	1,706	1,509	5.1
Kingston, Ont.	452	0	10	462	3,035	1.4
Peterborough, Ont.	F	F	F	F	F	F
Oshawa, Ont.	616	1	13	630	1,905	1.9
Toronto, Ont.	6,610	7	143	6,760	1,322	20.3
Hamilton, Ont.	1,190	1	26	1,217	1,757	3.7
St. Catharines-Niagara, Ont.	722	1	16	738	1,892	2.2
Kitchener, Ont.	922	1	20	943	2,090	2.8
Brantford, Ont.	F	F	F	F	F	F
Guelph, Ont.	F	F	F	F	F	F
London, Ont.	902	1	19	923	2,015	2.8
Windsor, Ont.	679	1	15	694	2,147	2.1
Barrie, Ont.	385	0	8	393	2,221	1.2
Greater Sudbury, Ont.	440	0	9	450	2,844	1.4
Thunder Bay, Ont.	221	0	5	226	1,840	0.7
Winnipeg, Man.	1,205	1	26	1,232	1,774	3.7
Regina, Sask.	389	0	8	398	2,041	1.2
Saskatoon, Sask.	375	0	8	384	1,640	1.2
Calgary, Alta.	1,946	2	42	1,991	1,844	6.0
Edmonton, Alta.	1,873	2	40	1,915	1,851	5.7
Kelowna, B.C.	350	0	8	358	2,204	1.1
Abbotsford-Mission, B.C.	277	0	6	283	1,779	0.8
Vancouver, B.C.	2,542	3	55	2,599	1,228	7.8
Victoria, B.C.	611	1	13	625	1,893	1.9
Non-CMAs [1]	23,613	26	510	24,149	...	...
All census metropolitan areas	32,582	35	703	33,320	1,549	100.0

1. Non-CMAs is an aggregation of geographic areas that are not designated as CMAs but make up the balance of the area.
Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation.

Appendix A – Data and methodology

Data

The two principal data sources used in the study are Statistics Canada's Material and Energy Flow Accounts (MEFA), and the survey of private vehicle energy use conducted as part of the Canadian Vehicle Survey. The MEFA record in physical terms only, the flow of materials and energy, in the form of natural resources and wastes between the economy and the environment. They are linked directly with the input-output accounts, which allows the calculation of important indicators of the resource and waste intensity of economic activity.[1]

The biennial survey of private vehicle energy use is conducted as part of the CVS by Transportation Division, on behalf of Environment Accounts and Statistics Division (EASD). The first results of the 2007 survey have been used in this study. The CVS is a voluntary vehicle-based survey that provides quarterly and annual estimates of road vehicle activity (for example, fuel consumption and distance travelled) by vehicles registered in Canada. The survey is conducted on a sample of vehicles drawn from vehicle registration lists provided by the provincial and territorial governments. At the time of the study, the vehicle energy use data from the survey were only available for reference year 2007 (Text box: **The Canadian Vehicle Survey**).[2]

Other supplementary data sources such as Environment Canada's *National Inventory Report*, the Census of population, input-output tables, Income and Expenditure Accounts of the System of National Economic and Environment Accounts, and the Survey of Household Spending have also been used. It should be noted that, the population data used to calculate per capita emissions in the study were obtained from CANSIM. Preliminary population estimates that were available at the time of the study are subject to revisions upon subsequent data releases. As a result, any revisions in population estimates are likely to yield slightly different results. This is also true for other data series used in the study, such as the personal expenditure on motor fuels and lubricants.

1. For more information, see section "Material and Energy Flow Accounts of the Canadian System of Environmental and Resource Accounts" in appendix A.
2. Although the CVS' most recent reference year for its published annual estimates is 2008, the microdata required for conducting the study were only available for 2007.

The Canadian Vehicle Survey

The CVS is a voluntary vehicle-based survey that provides quarterly and annual estimates of road vehicle activity (vehicle-kilometres and passenger-kilometres) broken down by types of vehicles and characteristics of vehicles registered in Canada. A quarterly sample of vehicles is drawn from vehicle registration lists provided by the provincial and territorial governments. The provincial component of the survey consists of two steps. The first step is a computer assisted telephone interview with the registered owners of the sampled vehicles. This interview is used to collect some general information on the usage of the vehicle as well as to ask the respondent to complete a trip log specific to his/her vehicle type. The trip log is then mailed out as a second step. If respondents cannot be contacted by phone, the trip log is mailed out with a short questionnaire to collect some of the information normally collected during the telephone interview.

The territorial component of the survey consists of two short questionnaires. One is mailed to the respondents at the beginning of the quarter and the other is mailed at the end of the quarter. The first questionnaire asks respondents to record the odometer reading at the beginning of the first day of the quarter. All those returning the first questionnaire are mailed a second questionnaire asking them to record the odometer reading at the beginning of the first day of the next quarter. These two odometer readings allow the calculation of the distance the vehicle was driven during the quarter. Survey collection began on February 1, 1999. Only eight provincial/territorial vehicle registration lists were received in time to be included in the sample at that time, but over the remainder of 1999, the other lists were received. Starting October 1, 1999, vehicles from all provinces and territories were included in the survey.

Source(s): Statistics Canada, 2009, *Canadian Vehicle Survey, Annual, 2008*, Catalogue no. 53-223-X.

Methodology

The GHG estimates by type of greenhouse gas (carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O)) were derived by adopting a methodology that is found in Environment Canada's *National Inventory Report, 2009* (NIR), the Canadian government's submission to the UN Framework Convention on Climate Change. The methodology is based on the following equation used for estimating emissions for general fuel combustion, described as:

$$E_{Category,G} = FC_{F,R} \times EF_{G,F,R,T}$$

where $E_{Category,G}$ is GHG emissions by source category and by gas, $FC_{F,R}$ is quantity of fuel consumed (in physical units, such as kg, L, or m^3) by type of fuel and by region, $EF_{G,F,R,T}$ is country specific emission factor (in physical units) by GHG, by fuel type, by region (where available) and by technology.[3]

The household sector's energy consumption by type of fuel was compiled and converted into volume of litres. The corresponding emission factors were then applied to each fuel type, to arrive at estimates of vehicle emissions by type of greenhouse gas for each region and for each type of fuel. The results were then aggregated to arrive at the final estimates of GHG emissions, which were then converted to carbon dioxide equivalent estimates.[4]

Intensity levels were calculated as GHG emissions from private vehicle operation divided by households' expenditure on motor fuels.[5] Intensity captures the quantity of emissions produced, measured in physical units per a unit value of household consumption, measured in constant dollar expenditure, chained (2002) dollars. In other words, it is the amount of emissions generated from a dollar's worth of personal expenditure on motor fuels. GHG emissions from private vehicle operation as a share of total GHG emissions of the household sector were also among the additional variables analyzed.

The emissions estimates in the study were developed in two stages. The first stage dealt with a time series component that covers the period 1990 to 2007, using mainly MEFA data. MEFA data were not available for the last two years (2006 and 2007) of the period under study. As a result, the emissions estimates for these two years were developed using NIR's road transportation emissions data as input in order to estimate the share of private vehicle emissions out of the total road transportation emissions published by Environment Canada. These

3. For more details, see "Methodology and Data for Estimating Emissions from Fossil Fuel Combustion," in Annex 2 of the *National Inventory Report: 2009*, page 253.
4. Each of the GHGs has a unique average atmospheric lifetime over which it is an effective climate-forcing agent. The concept of global warming potential (GWP) has been introduced to equate this climate forcing for different GHGs to that of CO_2.
5. Motor fuels and lubricants is a personal expenditure category used in the system of national accounts for GDP compilation. Although more precise, a sub-category that excludes lubricants is not available.

estimates for 2006 and 2007 will be revised along with other years that are subject to revision, subsequent to the release of MEFA estimates during the next two years.

In the second stage, 2007 emissions estimates were produced for the total provincial population by income groups. Total and per capita emissions estimates by province and CMA were developed using data from the CVS. The 2007 national, provincial and CMA emissions levels from light vehicles operated by gasoline and diesel fuels were calculated by applying a ratio to split out the energy consumption of private households. This was done by using MEFA's household energy consumption estimates in terajoules for reference year 2005.

The 2007 estimates were developed based on the assumption that most privately owned and operated vehicles are classified to the light vehicle category and are operated either on gasoline or diesel. This leaves out the small percentage of privately owned and operated vehicles that are in the heavy vehicle category as well as those light vehicles operating on other fuel types. According to the CVS, in 2007, 99.6% of all the vehicles in scope for the survey operated either on gasoline or diesel fuel. As well, 96.1% of light vehicles operated on gasoline or diesel fuel. The other underlying assumption is that the ratio of use of fuel type (gasoline-to-diesel) does not significantly vary over the different geographic regions. This assumption has also been necessary in order to get around the constraints of micro data by type of fuel. As a result, the personal sector's gasoline-to-diesel ratio at the national level has been applied to the aggregate personal fuel consumption figures of each of the geographic regions addressed in the study.

Emissions per kilometre

The estimates showed that at the CMA level, model-year and vehicle-type variables were the most important indicators of vehicle emissions. Although consistent for the most part, emissions per kilometre as a variable, at times tends to produce inconsistent results for high-traffic-density CMAs such as Toronto or Montreal. For example, if we hold other factors constant, a vehicle driven only 10 kms in high-traffic-density area in Toronto is more likely to consume more fuel and therefore produce more emissions than a vehicle driven 15 kms in a low-traffic-density CMA such as Kingston.

Variations in emissions per kilometre among CMAs originate mainly from two factors that affect the total fuel consumption estimate, the FCR (fuel consumption ratio) and the size of the vehicle population. The FCR varies by model year, vehicle body type, and whether the vehicle is used for city or highway driving, among other things. As a result, two CMAs with the same size of vehicle population and kilometres driven can produce two very different levels of emissions depending on their respective fleet composition (in terms of model year and body type of the vehicles) and proportion of city and highway kilometres driven.

The fuel consumption estimates in this paper were obtained from the CVS as actual volumes of fuel consumptions reported by the drivers as opposed to fuel consumption estimates modelled based on FCR, vehicle kilometre, and vehicle population as described in the NIR.[6] Comparison of fuel consumption estimates of the various data sources and their respective methodologies is therefore outside of the scope of this paper.[7]

Comparison of methodological applications with Environment Canada's National Inventory Report, 1990-2007

Although the methodology is similar to the one used by Environment Canada in the NIR, the differences in the emissions estimates of the two studies are mainly due to distinctions in data sources used and coverage of the vehicle population. In this study, the emissions estimates for the provinces and CMAs were developed using survey based fuel data on actual fuel consumption figures (on gasoline and diesel only) reported by respondents who owned or leased the vehicles in scope for the survey. In the NIR, however, estimates of emissions were produced using

6. For more detailed explanation on how FCR is used in the estimation of fuel consumption, see Environment Canada, April 2009, *National Inventory Report Greenhouse Gas Sources and Sinks in Canada, 1990-2007*, page 283. Natural Resources Canada, *Fuel Consumption Guide 2009*, page 12.
7. For more detailed discussion on the comparison of fuel consumption estimates of the various data sources and their respective methodologies, see Statistics Canada, 2009, "Personal Use Vehicles in Canada: Fuel Consumption Profile and Comparative Analysis 2007 Canadian Vehicles Survey Results," *Environment Accounts and Statistics Analytical and Technical Paper Series*, November, Catalogue no. 16-001-M2009009.

fuel data on all vehicle fuel types derived from observed trends (at least for the years 2003 to 2007), along with fuel conversion factors (FCRs) and data on kilometres driven.[8]

Our estimates also represent the emissions of the personal sector while the NIR estimates represent emissions from vehicles in the total economy. The difference in the coverage of the vehicle population is also partly due to the variation in the definition of light vehicles. Light-duty vehicles are defined in the CVS as those vehicles with gross vehicle weight rating (GVWR) below 4.5 tonnes, whereas in the NIR, light vehicles and trucks are those with a GVWR below or equal to 3.9 tonnes.

Environment Canada's methodology also accounts for the deterioration of catalytic converters that affect tail pipe emission rates of CH_4 and N_2O. This was done by disaggregating the vehicle population and applying technology-specific deterioration rates to light-duty vehicles and trucks with catalytic-controlled technologies.[9] In our study, the MEFA based time series estimates (for Canada) were built by taking the effect of deterioration of catalytic converters into account. However, the CVS based estimates (for the provinces and CMAs), did not include any adjustments to that effect. This is because the CVS does not collect data on the availability of tail pipe emission controlling technologies such as catalytic converters on private vehicles. Instead, until reliable information is available to account for the deterioration of catalytic converters, this study used the most conservative emission factors for CH_4 and N_2O among those published by EC (for each type of emission control technology).

Material and Energy Flow Accounts of the Canadian System of Environmental and Resource Accounts

The Material and Energy Flow Accounts (MEFA) are organized around the accounting framework of the Input-Output Accounts of the Canadian System of National Accounts (CSNA). The MEFA also share their classifications of industries, households and governments with the Input-Output Accounts. The methods used to estimate flows of resources and wastes in MEFA are described below.

Energy

Reliable, quantitative estimates of annual energy use are available for the major energy-using industries directly from Statistics Canada surveys. Little more is required to incorporate these data into the MEFA than to aggregate them according to the MEFA classifications of industries and energy commodities. Eleven energy commodities are represented in the accounts: coal, crude oil, natural gas, liquid petroleum gases, electricity, coke, motor gasoline, diesel fuel, aviation fuel, light fuel oil and heavy fuel oil. Both the consumption of these commodities for their energy content (the combustion of gasoline in motor vehicles for example) and as material feed stocks (natural gas used as a raw material in fertilizer production for example) are measured in the accounts. The 11 energy commodities represented in the MEFA match exactly with those represented in the Input-Output Accounts. Moreover, the *Report on Energy Supply Demand in Canada* (RESD) (Statistics Canada, Catalogue no. 57-003-X) provides benchmark estimates of total annual availability for each energy commodity. Total consumption of each of the 11 energy commodities represented in the MEFA must be equal to the reported domestic use in the RESD.

In the case of energy consumers for which suitable quantitative data are not directly available, an alternative estimation method based on the Input-Output Accounts is used. The use of the Input-Output Accounts first requires that the available quantitative data be summed for each energy commodity. These amounts are then subtracted from total availability by commodity (from the Report on Energy Supply Demand in Canada), leaving a residual quantity of unallocated availability for each commodity. These residual quantities represent consumption by those consumers for which no direct quantitative data are available. The equivalent value of their energy consumption is calculated from the Input-Output Accounts by distributing the residual value according to the dollar value of purchases in the Input-Output Accounts.

8 *Ibid*

9 For full detailed explanation, see Environment Canada, 2009, "Technology Penetration," *National Inventory Report: Greenhouse Gas Sources and Sinks in Canada, 1990-2007*, pages 281 to 283.

Greenhouse gases

Statistics Canada's energy account and Environment Canada's national inventory of greenhouse gas emissions are used as the basis for the estimation of the greenhouse gas emissions data (carbon dioxide, methane and nitrous oxide) included in the MEFA.

Emissions of carbon dioxide are the most straightforward of the greenhouse gases to measure. Emissions of this gas are primarily related to the combustion of fossil fuels. Environment Canada calculates a single set of emission factors that accurately express the quantity of carbon dioxide produced per unit of fossil fuel burned (in tonnes of CO_2 per unit of fuel). These factors are combined with MEFA energy data to estimate carbon dioxide emissions from fossil fuel.

Estimates of methane and nitrous oxide emissions from on-road transportation are taken from the results of a computer simulation model known as MGEM (Mobile Greenhouse Gas Emissions Model) adapted by Environment Canada from the Mobile model originally developed by the U.S. Environmental Protection Agency. MGEM produces national and provincial emissions estimates based on the national vehicle fleet, fuel consumption ratios, kilometres travelled and other relevant factors.

The incorporation of data from MOBILE into the MEFA is not straightforward due to lack of appropriate vehicle registration data related to vehicle ownership by industry. Instead, implicit methane and nitrous oxide emissions factors are derived from the information in the NIR, and these are applied to industries and households based on the types of vehicles commonly used in each sector.

Emission factors for non-combustion uses of fossil fuels (for example, feed stocks) and industrial processes have also been developed by Environment Canada to estimate their associated carbon dioxide emissions. Estimates of the emissions of methane and nitrous oxides are also included in the MEFA. It is possible to aggregate the emissions and express them as a single value with an index known as global warming potential (GWP). GWP measures the heat-trapping potential of each greenhouse gas. Carbon dioxide, the least effective of the gases at trapping heat, is arbitrarily assigned a GWP of one; other gases are assigned values in proportion to their heat-trapping potential relative to that of carbon dioxide (21 for methane and 310 for nitrous oxide). GWP is used in the MEFA to weight and aggregate emissions of carbon dioxide, methane and nitrous oxide. Aggregate greenhouse gas emissions for industries, households and governments are expressed in terms of "carbon dioxide equivalent" emissions.[10]

10. Statistics Canada. 2006. *Concepts, Sources and Methods of the Canadian System of Environmental and Resource Accounts*. Catalogue no. 16-505-G.

Appendix B – Comparison of National Inventory Report and Canadian Vehicle Survey emissions estimates for light-duty vehicles and trucks, 2007

Table A
Comparison of National Inventory Report and Canadian Vehicle Survey emissions estimates for light-duty vehicles and trucks, 2007

	National Inventory Report (NIR)	Canadian Vehicle Survey (CVS)	Difference between NIR and CVS	CVS as percentage of NIR [1]
	kt of CO_2 equivalent			percent
Total, all provinces	**88,788**	**57,469**	**31,319**	**65**
Newfoundland and Labrador	1,476	797	679	54
Prince Edward Island	467	251	216	54
Nova Scotia	2,648	1,875	774	71
New Brunswick	2,346	1,428	918	61
Quebec	19,881	12,274	7,607	62
Ontario	34,347	22,384	11,963	65
Manitoba	3,174	2,401	773	76
Saskatchewan	3,746	2,184	1,562	58
Alberta	11,720	7,073	4,646	60
British Columbia	8,984	6,802	2,182	76

1 The column represents the household sectors' share of vehicle emissions from light-duty vehicles and trucks.
Source(s): Statistics Canada, Environment Accounts and Statistics Division, 2009, special tabulation. Environment Canada, April 2009, *National Inventory Report: Greenhouse Gas Source and Sinks in Canada, 1990-2007*.

Appendix C – Questionnaires and reporting guides – Canadian Vehicle Survey, 2007 (CVS)

Copies of the questionnaires and reporting guides can be seen at the end of this report (or IMDB record number 2749).

- *Canadian Vehicle Survey* (http://www.statcan.gc.ca/imdb-bmdi/instrument/2749_Q6_V2-eng.pdf)
- *Canadian Vehicle Survey - H* (http://www.statcan.gc.ca/imdb-bmdi/instrument/2749_Q3_V8-eng.pdf)
- *Canadian Vehicle Survey - L* (http://www.statcan.gc.ca/imdb-bmdi/instrument/2749_Q2_V8-eng.pdf)
- *Canadian Vehicle Survey - T1* (http://www.statcan.gc.ca/imdb-bmdi/instrument/2749_Q4_V11_B.pdf)
- *Canadian Vehicle Survey - T2* (http://www.statcan.gc.ca/imdb-bmdi/instrument/2749_Q5_V12_B.pdf)

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Statistics Canada, 2008, *Canadian Vehicle Survey: Annual, 2007*, Catalogue no. 53-223-X.

Statistics Canada, 2009, *Report on Energy Supply and Demand in Canada, 2006*, Catalogue no. 57-003-X.

Statistics Canada, *Households and the Environment: Annual 2006*, Catalogue no. 11-526-X.

Statistics Canada, *Human Activity and the Environment: Annual Statistics 2007 and 2008*, Catalogue no. 16-201-X.

Canadian Vehicle Survey

Si vous préférez ce questionnaire en français, veuillez nous appeler au 1-800-647-0642.

Confidential once completed
Statistics Act, R.S.C. 1985, c. S19

Attach Label Here

1. Do you still own or lease the vehicle described on the label above?

1 ◯ Yes

2 ◯ Never owned or leased the identified vehicle

3 ◯ No → **Was this vehicle,** *(check where applicable and record the date in the box provided)*

- 1 ◯ Sold/traded
- 2 ◯ Scrapped
- 3 ◯ Returned (end of lease)
- 4 ◯ Leased to someone else
- 5 ◯ Other: please specify _____

➡ Date from which you no longer owned/leased this vehicle: day | month | year

Note: If you do not own or lease this vehicle, please stop at this point and mail back the questionnaire.

2. Which of the following best describes this vehicle?

1 ◯ Car
2 ◯ Station wagon
3 ◯ Van
4 ◯ Sport utility (Bronco, Blazer, Jeep, Pathfinder)
5 ◯ Pick up
6 ◯ Bus
7 ◯ Straight truck
8 ◯ Truck tractor
9 ◯ Other vehicle: *please specify:* _____

3. What kind of fuel does this vehicle use?

1 ◯ Gasoline
2 ◯ Diesel
3 ◯ Natural gas
4 ◯ Propane
5 ◯ Ethanol
6 ◯ Other, *specify:* _____

Please continue on the other side.

FOR INFORMATION ONLY

5-5403-92.1: 2008-11-26 STC/TRA-400-75103

Statistics Canada Statistique Canada

Canada

4. Please enter the date and odometer readings for the next 8 days starting tomorrow.

Day 1 Date : day month year	Odometer at **start** of day:	○ kilometres ○ miles
Day 2 Date : day month year	Odometer at **start** of day:	
Day 3 Date : day month year	Odometer at **start** of day:	
Day 4 Date : day month year	Odometer at **start** of day:	
Day 5 Date : day month year	Odometer at **start** of day:	
Day 6 Date : day month year	Odometer at **start** of day:	
Day 7 Date : day month year	Odometer at **start** of day:	
Day 8 Date : day month year	Odometer at **start** of day:	

5. Is there a main driver of this vehicle?
(The main driver is someone who drove more than half of the distance travelled during the eight days)

○ Yes ○ No

If there is a main driver, please complete the following questions.

6. Is the main driver male or female?

○ Male ○ Female

7. What is the age group of the main driver?

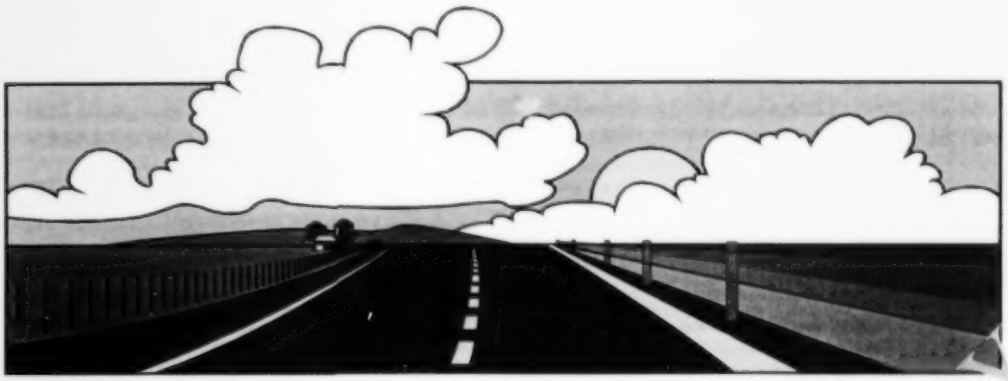
1 ○ Under 20
2 ○ 20 to 24
3 ○ 25 to 34
4 ○ 35 to 44
5 ○ 45 to 54
6 ○ 55 to 64
7 ○ 65 to 74
8 ○ 75 to 84
9 ○ 85 and over

Please mail back when completed. Thank you very much for your cooperation.

FOR INFORMATION ONLY

Canadian Vehicle Survey

H



Confidential once completed

Collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S19.

Si vous préférez recevoir ce carnet de bord en **français**, veuillez nous contacter au numéro de téléphone indiqué ci-dessous.

Survey Objective

The purpose of this survey is to help Transport Canada and Natural Resources Canada improve road safety, monitor fuel consumption and deal with the impact of vehicle usage on the environment. The information you give will be combined with other data already available to provide a better understanding of vehicle usage, safety issues, and fuel purchases. The information you are asked to provide in this log covers:

- Start and end time of each trip – to see when traffic is on the road.
- Odometer readings for each trip – to measure distance travelled.
- Number of passengers on each trip and types of roads driven – to provide information related to safety.
- Trip purpose – to determine the type of trips.
- Truck configuration – to see what types of configurations are being used.
- Driver's sex and age – to obtain a profile of drivers.
- Fuel purchases – to monitor fuel consumption.

For more background information about specific questions, please see pages 32 and 33.

Reporting procedure

Please complete the trip portion of the log for the first seven (7) days of the period stated on the label on page 2. Then continue to complete the fuel portion of the log for the remainder of the period stated on the label or until you have recorded five fuel purchases.

Any questions or concerns? ☎ 1-800-647-0642

Thank you very much for your cooperation.

5-5403-94.1: 2009-01-15 STC/[illegible]-400-75103

Statistics Canada Statistique Canada

Canada

PLACE LABEL HERE

Mailing instructions: → 1. Please remove paper strip. 2. Fold flap and seal onto the back cover. 3. Mail.

Please read this first

Please do not complete this log while driving.

1. Please verify that the vehicle information on the label above is correct and write any corrections on the label.
2. Please fill out the log only for the vehicle identified on the label.
3. All drivers using this vehicle should complete the log.
4. Most people have found that it is easier to complete the log if it is kept in the vehicle.

General Information

1. Do you still own or lease the vehicle described on the label above?

- ○ Yes
- ○ Never owned or leased the identified vehicle
- ○ No → **Was this vehicle,** (please check where applicable and record the date in the box provided)

date

- 1○ **sold/traded**
- 2○ **scrapped**
- 3○ **returned (end of lease)**
- 4○ **leased to someone else**

day month year

- 5○ **other:** *please specify* _____

Note: If you do not own or lease this vehicle, please mail back the log at this point.

2. Which of the following best describes this vehicle?

- 1○ car
- 2○ station wagon
- 3○ van
- 4○ sport utility (Explorer, Blazer, Jeep, etc.)
- 5○ pick-up
- 6○ bus
- 7○ straight truck
- 8○ truck tractor
- 9○ other: *please specify* _____

3. Type of activity

Please indicate whether this vehicle is currently being used by

- 1○ a for-hire trucking carrier
- 2○ another operator whose main business is trucking
- 3○ a person, company or agency whose main business is not trucking
- 4○ other

4. What kind of fuel does this vehicle use?

- 1○ gasoline
- 2○ diesel
- 3○ natural gas
- 4○ propane
- 5○ ethanol
- 6○ other, *please specify* _____

FOR INFORMATION ONLY

Please continue
on the next page.

FOR INFORMATION ONLY

Instructions for Completing the Log

Listed below are the instructions for completing the log. Please read them carefully and if you have any questions, contact us at the toll free number shown on the front cover.

Please complete the trip portion of the log for the first seven (7) days of the reporting period stated on the label on page 2, for the identified vehicle only.

Then continue to complete the fuel portion of the log for the remainder of the period stated on the label or until you have made five (5) fuel purchases. This information can be taken from company records, or you could send us copies of the driver logs.

Please fill in the **Driver Information** section on the fold-out page for all drivers using this vehicle.

Examples
Please refer to the Examples on pages 24 to 31 for help in completing the log.

Trip
A trip is defined as your travel from one location to another for a **specific purpose or use such as carrying goods, going to or from work, or using the vehicle for personal use. Report a separate trip if there is:**

- **a change of purpose or use**

  or

- **a stop of more than 30 minutes**

  or

- **a change in the truck configuration**

  or

- **a change in the status of the load from loaded to empty or the reverse**

  or

- **a change of driver**

Date/time of departure and date/time of arrival
Please indicate the date and time of departure and the date and time of arrival for each trip. This information will enable us to know what times of day the vehicle is on the road.

Examples of how to complete this log are shown on pages 24 to 31.

Example 1. A change in the status of the load from empty to loaded - pages 24 and 25.

Example 2. A change in the trip purpose, a stop of more than 30 minutes and a fuel purchase - pages 26 and 27.

Example 3. A change in the truck configuration - pages 28 and 29.

Example 4. A change of driver and two stops over 30 minutes - pages 30 and 31.

FOR INFORMATION ONLY

Dates Not in Use

If this vehicle was not "in use" for any days during the first seven (7) days of the reporting period stated on the label on page 2, please provide the date(s) below.

1. Day Month
2. Day Month
3. Day Month
4. Day Month
5. Day Month
6. Day Month
7. Day Month

Odometer Reading and Fuel Gauge

On the first day of the reporting period (start date) shown on the label on page 2, please record the date, the odometer reading and the fuel gauge.

→ **Day** (01-31) **Month** (01-12)

Odometer 1/10

○ km
○ miles

Fuel gauge

1 ○ full
2 ○ 7/8 full
3 ○ 3/4 full
4 ○ 5/8 full
5 ○ 1/2 full
6 ○ 3/8 full
7 ○ 1/4 full
8 ○ 1/8 full
9 ○ empty

Please record the date, the odometer reading and the fuel gauge before returning the questionnaire.

→ **Day** (01-31) **Month** (01-12)

Odometer 1/10

Fuel gauge

1 ○ full
2 ○ 7/8 full
3 ○ 3/4 full
4 ○ 5/8 full
5 ○ 1/2 full
6 ○ 3/8 full
7 ○ 1/4 full
8 ○ 1/8 full
9 ○ empty

Comments about the log

FOR INFORMATION ONLY

Note:

Please fold out this page.

It has the codes for the **Truck Configuration** and a section to be completed and used for **Driver Information**.

FOR INFORMATION ONLY

Truck Configuration Section

Please enter the following codes in the proper columns (I, II and III) of the truck configuration section of the log.

Truck Configuration Column I	Trailer Type Column II	Connection Type Column III
Code 1 - Straight truck 2 - Tractor only 3 - Tractor and 1 trailer 4 - Straight truck and trailer 5 - Tractor and 2 trailers 6 - Tractor and 3 trailers 7 - Other _____ *(please specify)*	Code 1 - Not applicable 2 - Van 3 - Flatbed 4 - Tanker 5 - Dump 6- Other _____ *(please specify)*	Code 1 - Not applicable 2 - "B" Train 3 - Other _____ *(please specify)*

Driver Information

For each driver of this vehicle, please complete the driver information below. Provide each driver's sex and age group. The column for driver's initials is for your use only so that you can easily identify which driver code belongs to which driver. Enter the appropriate driver code (A, B, C, D or E) for each trip in the **Driver** column on the log.

Driver's initials	Driver Code	Driver's sex	Driver's age-group
	A	○ Male ○ Female	1 ○ Under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 years and over
	B	○ Male ○ Female	1 ○ Under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 years and over
	C	○ Male ○ Female	1 ○ Under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 years and over
	D	○ Male ○ Female	1 ○ Under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 years and over
	E	○ Male ○ Female	1 ○ Under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 years and over

FOR INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	**Time**	**Odometer reading**	**Number of passengers (excluding current driver)**	**Date**	**Time**	**Odometer reading**	**Number of passengers (excluding current driver)**
TRIP 1	dd mm	: 00:00 to 23:59	1/10 ○ km ○ miles		dd mm	: 00:00 to 23:59	1/10 ○ km ○ miles	
TRIP 2	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 3	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 4	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

Please remember ...

For instructions on how to complete the log, see page 4.

What if the vehicle isn't used much - or at all?

This survey attempts to measure how much Canadians are using **or not using** their vehicles.

For our studies - a vehicle not in use is just as important as one that is. Days that the vehicle is **not used** should be recorded on Page 5.

Please mail back this log if you no longer own or lease this vehicle.

When to start a new trip

1. A change of purpose or use
2. If you stop longer than **30** minutes
3. If truck configuration has changed
4. If status of truck load changes (see page 4)
5. If the driver changes

CONFIDENTIAL

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out" page)* Code (A,B,C,D,E)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

Please record times in a 24H format
i.e. 6:00 PM = 18:00
10:30 PM = 22:30

Please select only **one** "Purpose of Trip".
(i.e. should be the main purpose)

For **examples** of different trip situations, please see pages 24 - 31

All kilometres or miles travelled during the first 7 days should be accounted for

Any fuel purchases? Please record purchases on pages 34 and 35

The number of passengers should include any spare drivers but NOT the actual driver.

Thank you very much for your time and participation.

INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 5	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 6	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 7	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 8	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 9	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out" page)* Code (A,B,C,D,E)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 10	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 11	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 12	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 13	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 14	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Code **Purpose of trip** 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	**Truck configuration** *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out" page)* **Code (A,B,C,D,E)**	**Trip type** Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Road type** **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	**Fuel purchased?** (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 15	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 16	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 17	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 18	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 19	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Code **Purpose of trip** 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	**Truck configuration** *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out" page)* **Code (A,B,C,D,E)**	**Trip type** Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Road type** **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	**Fuel purchased?** (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34. ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34. ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34. ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34. ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34. ○ No

FOR INFORMATION ONLY

REMINDER

Only 7 days worth of trips are necessary.

To complete the trip log portion (starting on page 6), you need to **report 7 days only** (beginning on the *start date* given on the label on page 2.)

Any day(s) that your vehicle was **not used** within that 7 day period (reported on page 5) reduces the number of trip days that you need to report. For example, if your vehicle was not used for 2 days, then you only need to report the trips made on the other 5 days.

Once you have completed the trip log portion, please continue to **complete the fuel log portion** (pages 34 and 35) **until 5 fuel purchases are made or until you reach the *stop date* on the label on page 2**.

When you have completed both the trip log portion and the fuel log portion, **please record the date, final odometer reading and fuel gauge on page 5 and mail the log back to us**.

Please see Page 4 for more details.

Thank you very much for your participation

FOR INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 20	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 21	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 22	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 23	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 24	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Code **Purpose of trip** 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	**Truck configuration** *(please use codes on "fold-out page")* **Column** I II III	**Driver, Code** *(please use codes on "fold-out" page)* **Code (A,B,C,D,E)**	**Trip type** Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Road type** **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	**Fuel purchased?** (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR INFORMATION ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 25	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 26	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 27	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 28	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 29	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

FOR ILLUSTRATION ONLY

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration (please use codes on "fold-out page") Column I / II / III	Power Code (please use codes on "fold-out" page)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PROTOTYPE ONLY

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 30	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 31	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 32	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 33	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	
TRIP 34	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out" page)* Code (A,B,C,D,E)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PUBLIC RELEASE

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 35	dd mm	: 00 00 to 23 59	1/10		dd mm	: 00 00 to 23 59	1/10	
TRIP 36	dd mm	: 00 00 to 23 59	1/10		dd mm	: 00 00 to 23 59	1/10	
TRIP 37	dd mm	: 00 00 to 23 59	1/10		dd mm	: 00 00 to 23 59	1/10	
TRIP 38	dd mm	: 00 00 to 23 59	1/10		dd mm	: 00 00 to 23 59	1/10	
TRIP 39	dd mm	: 00 00 to 23 59	1/10		dd mm	: 00 00 to 23 59	1/10	

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration *(please use codes on "fold-out page")* Column I II III	Driver, Code *(please use codes on "fold-out" page)* Code (A,B,C,D,E)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐ ☐ ☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PUBLIC REVIEW

Trip Log

Please read the instructions on page 4 and on the "fold-out" page before completing the trip log.

	Start of trip				End of trip			
	24 hour clock (00:00 to 23:59)							
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
TRIP 40	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 41	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 42	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 43	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→
TRIP 44	dd mm	: 00:00 to 23:59	1/10		dd mm	: 00:00 to 23:59	1/10	→

FOR INFORMATION ONLY

Please refer to the examples on pages 24 to 31.

Purpose of trip Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Truck configuration *(please use codes on "fold-out page")* Column I / II / III	Driver, Code *(please use codes on "fold-out page")* Code (A,B,C,D,E)	Trip type Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	Road type **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	Fuel purchased? (either purchased or from company supplies)
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐☐☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐☐☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐☐☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐☐☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	☐☐☐	☐	○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ☐☐☐ 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PROTOTYPE ONLY

Trip Log - Examples

	Start of trip			End of trip			
	24 hour clock (00:00 to 23:59)						
	Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)
	Example 1. Two trips due to a change in load from empty to loaded On September 21, a farmer drove his empty straight truck to pick up a load of fertilizer. The odometer reading was 80795 kilometres when he left his house at 7:00. When he arrived at his destination at 7:30, the odometer reading was 80825 kilometres. The fertilizer is loaded and he leaves for his farm at 7:50 that same morning and arrives back at 8:22. The odometer reading was 80857.						
TRIP 1	21 09 (dd mm) 7:00 (00:00 to 23:59)		80795 (1/10) (km / miles)	0	21 09 (dd mm) 7:30 (00:00 to 23:59)		80825 (1/10) (km / miles)	0
TRIP 2	21 09 (dd mm) 7:50 (00:00 to 23:59)		80825 (1/10)	0	21 09 (dd mm) 8:22 (00:00 to 23:59)		80857 (1/10)	0
TRIP 3	(dd mm) : (00:00 to 23:59)		(1/10)		(dd mm) : (00:00 to 23:59)		(1/10)	
TRIP 4	(dd mm) : (00:00 to 23:59)		(1/10)		(dd mm) : (00:00 to 23:59)		(1/10)	

FOR INFORMATION ONLY

Purpose of trip	Truck configuration	Driver, Code	Trip type	Road type	Fuel purchased?
Code 1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	*(please use codes on "fold-out page")* Column I II III	*(please use codes on "fold-out page")* Code (A,B,C,D,E)	Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	(either purchased or from company supplies)

The farmer is a 47 year old male. This information would be completed on the fold out page. On the trip log, the driver code would be "A".

Since the whole trip took place within the same province, it would be coded as "within the province".

There were no fuel purchases.

Note: The trip information could be taken from company records, or you could send us copies of the driver logs, or it could be filled in by the driver(s).

Purpose of trip	Truck configuration	Driver, Code	Trip type	Road type	Fuel purchased?
○1 ○2 ✓3 ○4 ○5 ○6 ○ dangerous goods ○7 Other _____	1 1 1	A	✓ 1 ○ 2 ○ 3 ○ 4	○ Yes ✓ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ✓ No
○1 ✓2 ○3 ○4 ○5 ○6 ✓ dangerous goods ○7 Other _____	1 1 1	A	✓ 1 ○ 2 ○ 3 ○ 4	○ Yes ✓ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ✓ No
○1 ○2 ○3 ○4 ○5 ○6 ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 ○ dangerous goods ○7 Other _____			○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PUBLIC RELEASE

Start of trip				End of trip			
24 hour clock (00:00 to 23:59)							
Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)

Example 2. Three trips due to a change in trip purpose and one stop over 30 minutes

On February 19, the driver of a straight truck left his home in Ontario at 6:43 to go to the terminal of a local broker. The odometer reading was 105296 miles at the start of his trip. He made a fuel purchase before arriving at the terminal at 7:15. The odometer reading was 105310.

At the terminal, he picked up a load and left the terminal at 8:30 to go to Montreal, where he made 3 short stops for deliveries, none of which was more than thirty minutes. He completed his last delivery at 12:20. The odometer reading was 105550.

	Start of trip				End of trip			
TRIP 1	19 02 (dd mm)	6:43 (00:00 to 23:59)	105296 (1/10) ○ km ◉ miles	0	19 02 (dd mm)	7:15 (00:00 to 23:59)	105310 (1/10) ○ km ◉ miles	0
TRIP 2	19 02 (dd mm)	8:30 (00:00 to 23:59)	105310 (1/10)	0	19 02 (dd mm)	12:20 (00:00 to 23:59)	105550 (1/10)	0
TRIP 3	19 02 (dd mm)	13:05 (00:00 to 23:59)	105550 (1/10)	0	19 02 (dd mm)	18:15 (00:00 to 23:59)	105793 (1/10)	0
TRIP 4	dd mm	: (00:00 to 23:59)	(1/10)		dd mm	: (00:00 to 23:59)	(1/10)	

FOR INFORMATION ONLY

Code — Purpose of trip	Truck configuration (please use codes on "fold-out page")	Driver, Code (please use codes on "fold-out page")	Trip type	Road type	Fuel purchased?
1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Column I II III	Code (A,B,C,D,E)	Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	(either purchased or from company supplies)

He then stopped for lunch for 45 minutes and returned home. When he arrived home, it was 18:15 and the odometer reading was 105793.

The driver is a 35 year old male. This information would be completed on the fold out page. On the trip log, the driver code would be "A".

Since the first trip took place within the same province, it would be coded as "within the province".
The trip to Montreal and the trip home would be coded as "between provinces". Information about the fuel purchase is recorded on pages 34 and 35.

Note: The trip information could be taken from company records, or you could send us copies of the driver logs, or it could be filled in by the driver(s).

○1 ○2 ○3 ○4 ✓5 ○6 → ○ dangerous goods ○7 Other _____	1	1	1	A	✓ 1 ○ 2 ○ 3 ○ 4	○ Yes ✓ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ○ km ○ miles	✓ Yes, go to page 34 ○ No
○1 ✓2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	1	1	1	A	○ 1 ✓ 2 ○ 3 ○ 4	✓ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 205 ○ km ✓ miles	○ Yes, go to page 34 ✓ No
○1 ○2 ○3 ○4 ○5 ✓6 → ○ dangerous goods ○7 Other _____	1	1	1	A	○ 1 ✓ 2 ○ 3 ○ 4	✓ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 210 ○ km ✓ miles	○ Yes, go to page 34 ✓ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____					○ 1 ○ 2 ○ 3 ○ 4	○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ○ km ○ miles	○ Yes, go to page 34 ○ No

FOR PERSONAL USE ONLY

Start of trip				End of trip			
24 hour clock (00:00 to 23:59)							
Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)

Example 3. Two trips due to a change in the truck configuration

A road tractor leaves Halifax for Fredericton on November 16 at 15:39 with two van trailers carrying paper, joined by a "B" connector. The odometer reading is 204583 kilometres at the start of the trip. The truck arrives in Fredericton at 21:52 and delivers one of the trailers. The odometer reading was 205058. The unit then leaves Fredericton at 22:47 for Moncton where the second trailer is delivered. When the truck arrives at 00:50, the odometer reading is 205258.

TRIP 1	16 11 (dd mm)	15:39 (00:00 to 23:59)	204583 (1/10) ☑ km ○ miles	0	16 11 (dd mm)	21:52 (00:00 to 23:59)	205050 (1/10) ☑ km ○ miles	0
TRIP 2	16 11 (dd mm)	22:47 (00:00 to 23:59)	205058 (1/10)	0	17 11 (dd mm)	00:50 (00:00 to 23:59)	205258 (1/10)	0
TRIP 3	dd mm	: (00:00 to 23:59)	1/10		dd mm	: (00:00 to 23:59)	1/10	
TRIP 4	dd mm	: (00:00 to 23:59)	1/10		dd mm	: (00:00 to 23:59)	1/10	

FOR INFORMATION ONLY

Code — Purpose of trip	Truck configuration (please use codes on "fold-out page") Column I	II	III	Driver, Code (please use codes on "fold-out page") Code (A,B,C,D,E)	Trip type Code	Road type	Fuel purchased?
1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)					1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	(either purchased or from company supplies)

The driver is 54 year old male. This information would be completed on the fold out page. On the trip log, the driver code would be "A".

The first trip would be recorded as "between provinces" (Nova Scotia to New Brunswick) while the second trip was "within the province" (New Brunswick).

There were no fuel purchases.

Note: The trip information could be taken from company records, or you could send us copies of the driver logs, or it could be filled in by the driver(s).

Purpose of trip	Truck configuration I	II	III	Driver, Code	Trip type	Road type	Fuel purchased?
○1 ⓥ2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	5	2	2	A	○1 ⓥ2 ○3 ○4	⌐ ⓥ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 420 ⓥ km ○ miles (1/10)	○ Yes, go to page 34 ⓥ No
○1 ⓥ2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____	3	2	1	A	ⓥ1 ○2 ○3 ○4	⌐ ⓥ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 178 ⓥ km ○ miles (1/10)	○ Yes, go to page 34 ⓥ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____					○1 ○2 ○3 ○4	⌐ ○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ○ km ○ miles (1/10)	○ Yes, go to page 34 ○ No
○1 ○2 ○3 ○4 ○5 ○6 → ○ dangerous goods ○7 Other _____					○1 ○2 ○3 ○4	⌐ ○ Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? ○ km ○ miles (1/10)	○ Yes, go to page 34 ○ No

FOR INFORMATION ONLY

Start of trip				End of trip			
24 hour clock (00:00 to 23:59)							
Date	Time	Odometer reading	Number of passengers (excluding current driver)	Date	Time	Odometer reading	Number of passengers (excluding current driver)

Example 4. Multiple trips due to a change of driver and two stops.

A straight truck leaves Calgary at 21:13 for Seattle on December 15, carrying automobile tires. The odometer reading is 83527 kilometres.

Driver "A" is a 33 year old female and driver "B" is a 48 year old male. This information would be recorded on the fold-out page.

The truck arrives at 10:45 the next day. The final odometer reading is 84497. The drivers take turns driving. A new trip is recorded each time there is a change of driver. In addition to the driver change at 3:25, there are two stops, each over 30 minutes between the time the truck leaves Calgary and the time it arrives in Seattle.

TRIP 1	15 12 (dd mm) 21:13 (00:00 to 23:59)	8 3 5 2 7 (1/10) ◉ km ○ miles	1	15 12 (dd mm) 23:47 (00:00 to 23:59)	8 3 7 0 ≤ (1/10) ◉ km ○ miles	1	→
TRIP 2	16 12 (dd mm) 1:05 (00:00 to 23:59)	8 3 7 0 5 (1/10)	1	16 12 (dd mm) 3:25 (00:00 to 23:59)	3 3 9 1 2 (1/10)	1	→
TRIP 3	16 12 (dd mm) 3:25 (00:00 to 23:59)	8 3 9 1 2 (1/10)	1	16 12 (dd mm) 4:12 (00:00 to 23:59)	8 4 0 0 7 (1/10)	1	→
TRIP 4	16 12 (dd mm) 5:34 (00:00 to 23:59)	8 4 0 0 7 (1/10)	1	16 12 (dd mm) 10:45 (00:00 to 23:59)	8 4 4 9 7 (1/10)	1	→

Code — Purpose of trip	Truck configuration (please use codes on "fold-out page")	Driver Code (please use codes on "fold-out page")	Trip type	Road type	Fuel purchased?
1 - Driving to or from service call 2 - Carrying goods or equipment (if applicable, please also check if carrying dangerous goods) 3 - Empty (unladen of goods) 4 - Other work purpose 5 - Driving to work 6 - Driving to home 7 - Other (please describe the purpose)	Column I / II / III	Code (A,B,C,D,E)	Code 1 - within province 2 - between provinces 3 - across Canada - U.S. border 4 - outside Canada	**Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**	(either purchased or from company supplies)

The first stop is at 23:47 to 01:05 for a meal while the second stop is from 04:12 to 05:34 due to a minor accident.

The first trip takes place entirely in Alberta. The second trip crosses into British Columbia. The third trip takes place entirely in British Columbia and the truck crosses the U.S. border during the final trip.

There were no fuel purchases.

Note: The trip information could be taken from company records, or you could send us copies of the driver logs, or it could be filled in by the driver(s).

Purpose of trip	Truck configuration	Driver Code	Trip type	Road type	Fuel purchased?
○1 ●2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other	1 1 1	A	●1 ○2 ○3 ○4	● Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 150 1/10 ● km ○ miles	○ Yes, go to page 34 ● No
○1 ●2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other	1 1 1	A	○1 ●2 ○3 ○4	● Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 200 1/10 ● km ○ miles	○ Yes, go to page 34 ● No
○1 ●2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other	1 1 1	B	●1 ○2 ○3 ○4	● Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 86 1/10 ● km ○ miles	○ Yes, go to page 34 ● No
○1 ●2 ○3 ○4 ○5 ○6 └→ ○ dangerous goods ○7 Other	1 1 1	B	○1 ○2 ●3 ○4	● Yes ○ No If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 302 1/10 ● km ○ miles	○ Yes, go to page 34 ● No

Detailed Information For Your Interest

Purpose of the survey

It is the goal of this survey to provide quarterly and annual estimates of vehicle usage and fuel consumption. Transport Canada and Natural Resources Canada sponsor the survey and use the information in conjunction with other data to monitor how vehicle use changes over time and how use affects safety, fuel consumption and the environment. The results are also the prime source of road vehicle use information for researchers and interested members of the public. Prior to this survey, there was no valid, comprehensive source for this information in Canada, even though about ninety percent of all travel in Canada is by road.

Why this vehicle was chosen

Your vehicle was one of those that was selected in your province/territory so that we can find out how you use it over the stated time period. To save money, we are keeping the number of vehicles sampled to a minimum, so it is important that we get your response. Your response is not analysed in any way that identifies you or your vehicle - it is only useful to us when combined with all the other responses. We get a representative picture by selecting vehicles at random from the official vehicle registration files, in order to cover the entire country and all types of vehicles, and we cover the whole year by selecting new ones every week. Once the completed forms are returned, we combine them to obtain the total distance driven.

The profile created from the sample includes distance driven for each day of the week, and each hour within the day, by sex and age group of drivers, by trip purpose, and by highways and other roads.

How we use each question

The odometer readings are the most important of all, allowing us to know the kilometres travelled for each trip and the total travelled by the vehicle during the survey day. These are essential to calculate the amount of travel in the country each year.

Date and time of departure and arrival tell us when trips start and finish, so we can show, for example, how much travel is on weekdays compared to weekends, in the morning and evening rush-hours compared to the middle of the day, or in the middle of the night. These questions also give us the trip duration in hours and minutes, which helps us determine how much of total travel is made up of very short local trips and how much of long intercity trips.

Number of passengers carried, including any spare drivers but excluding the current driver, at the beginning and end of each trip lets us calculate vehicle occupancy. By multiplying the number of passengers carried by the distance travelled, we produce passengers-kilometres.

FOR INFORMATION ONLY

Detailed Information For Your Interest

Purpose of trip helps to distinguish between broad categories of types of trips as trucks can be used for different purposes: for example, how many trucks are being used by small businessmen or farmers carrying equipment for their own operations, how many by larger businesses distributing their own goods or carrying them between plants, and how many by for-hire or contract carriers carrying for others. To estimate those, we also need to know how many are running empty, and how many are used for personal purposes (meaning not in the course of business).

The Driver Information is asked to provide driver's age group and sex, particularly for computation of accident rates by each group. The age categories listed are those normally used by safety agencies in compiling accident reports, so the estimates of kilometres travelled by age group can be combined with records of accident involvement to give accidents per vehicle-kilometre.

Truck configuration is asked because vehicles might be used with different numbers and types of trailers. We are interested in knowing when, where and for which purposes different configurations are used, and in monitoring changes in configurations over time (e.g. shifts to doubles from tractor-semis). The question asks for the configuration to be described in detail, including the types of any trailers and connections used for them.

Type of road attempts to distinguish between travel on urban streets, and that on highways or in rural conditions. We are attempting to do this by asking you how much of each trip is on roads with posted speed limits of 80 km/h or more, which we will use as an approximation of highway or rural conditions. This is an important distinction since safety, fuel consumption and emissions differ greatly between urban streets, and highways or rural conditions. But it is a difficult distinction to make, because people often don't know whether they are in an urban or a rural area, or whether the road they are on is classified as a street or a highway. The clearest difference that most people are aware of is the speed limit. Of course, we realise many drivers will not know exactly how many kilometres they drive on roads with posted speed limits of 80 km/h or more during a trip, so we expect only the best approximate answer the driver is able to provide.

Fuel purchases will be used to calculate fuel consumption in order to monitor trends in fuel use. The best way to calculate the fuel consumption is to have the odometer reading and amount of fuel purchased for **2 fill-ups** (gas tank is full after the fuel purchase). So, if possible, please provide information for at least **2 fill-ups** on the following pages. Without 2 fill-ups, it is possible to estimate fuel consumption by knowing the odometer reading and quantity of fuel purchased on several occasions, which is why we ask for all purchases you make to a maximum of 5 purchases.

Federal Agreement

To avoid duplication in surveys and to provide consistent statistics, Statistics Canada has entered into an agreement under section 12 of the *Statistics Act* with Transport Canada and Natural Resources Canada for the sharing of information from this survey. Under section 12 of the *Statistics Act*, you may refuse to share your information with Transport Canada and Natural Resources Canada by writing to the Chief Statistician and returning your letter of objection along with the completed questionnaire.

While participation in this survey is voluntary, your cooperation is very important.

Fuel Log

	Enter date of fuel purchase	Enter odometer reading at time of purchase	Type of fuel
EXAMPLE	Day 19 (01-31) Month 02 (01-12)	Odometer 105302 1/10 ○ kilometres ◉ miles	1 ○ regular gasoline 5 ◉ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other
1	Day (01-31) Month (01-12)	Odometer 1/10 ○ kilometres ○ miles	1 ○ regular gasoline 5 ○ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other
2	Day (01-31) Month (01-12)	Odometer 1/10	1 ○ regular gasoline 5 ○ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other
3	Day (01-31) Month (01-12)	Odometer 1/10	1 ○ regular gasoline 5 ○ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other
4	Day (01-31) Month (01-12)	Odometer 1/10	1 ○ regular gasoline 5 ○ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other
5	Day (01-31) Month (01-12)	Odometer 1/10	1 ○ regular gasoline 5 ○ diesel 2 ○ mid-grade gasoline 6 ○ natural gas 3 ○ premium gasoline 7 ○ propane 4 ○ ethanol blended gasoline 8 ○ ethanol 9 ○ other

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Enter quantity purchased	Enter amount spent	Price per litre/gallon	Fill-up indicator
162.5 (✓) litres ( ) US gallons ( ) other	$ 175.34	107.9 ¢	Was the fuel tank full after this purchase? (✓) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no

FOR INFORMATION ONLY

Canadian Vehicle Survey

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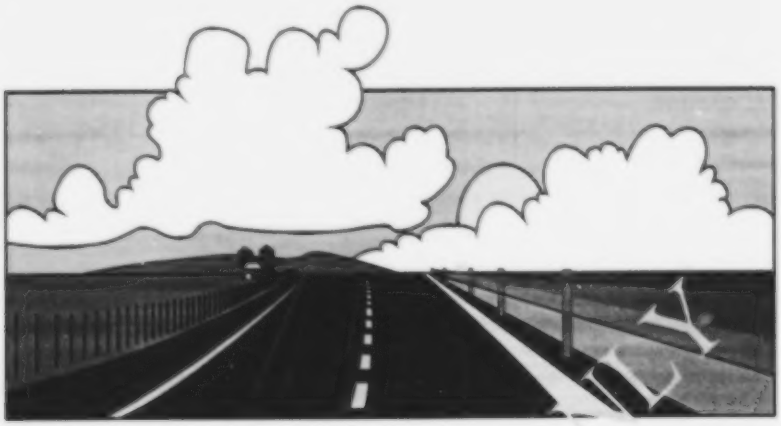

Confidential once completed

Collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S19.

Si vous préférez recevoir ce carnet de bord en **français**, veuillez nous contacter au numéro de téléphone indiqué ci-dessous.

Survey Objective

The purpose of the survey is to help Transport Canada and Natural Resources Canada improve road safety, monitor fuel consumption and deal with the impact of vehicle usage on the environment. The information you give us will be combined with other data already available to provide a better understanding of vehicle usage, safety issues, and fuel purchases. The information you are asked to provide in this log covers:

- Start and end time of each trip - to see when traffic is on the road.
- Odometer readings for each trip - to measure distance travelled.
- Origin of each trip - to see why people are travelling.
- Number and age of passengers on each trip and types of roads driven - to provide information related to safety.
- Driver's sex and age - to obtain a profile of drivers.
- Fuel purchases - to monitor fuel consumption.

For more background information about specific questions, please see pages 20 and 21.

Reporting procedure

Please begin completing this log on the start date shown on the label on page 2.

Please continue to complete the log until the stop date shown on the label.

If you finish recording **20 trips** and **2 fill-ups** (or 5 partial fill-ups) before the stop date, please return the log at that point.

Any questions or concerns? ☎ 1-800-647-0642

Thank you very much for your cooperation.

5-5403-83 1 2009-01-15 STC/TRA-400-75103

Statistics Canada Statistique Canada

Canada

Mailing instructions: → 1. Please remove paper strip. 2. Fold flap and seal onto the back cover. 3. Mail.

Place label here

Please read this first

Please do not complete this log while driving.

1. Please verify that the vehicle information on the label above is correct and write any corrections on the label.
2. Please fill out the log only for the vehicle identified on the label.
3. All drivers using this vehicle should complete the log.
4. Most people have found that it is easier to complete the log if it is kept in the vehicle.

General Information

1. Do you still own or lease the vehicle described on the label?

- ○ Yes
- ○ Never owned or leased the identified vehicle
- ○ No → **Was this vehicle,** (please check where applicable and record the date in the box provided)
  - 1 ○ **sold/traded**
  - 2 ○ **scrapped**
  - 3 ○ **returned (end of lease)**
  - 4 ○ **leased to someone else**

  date: day / month / year
  - 5 ○ **other:** *please specify:* _____

Note: If you do not own or lease this vehicle, please mail back the log at this point.

2. Which of the following best describes this vehicle?

- 1 ○ car
- 2 ○ station wagon
- 3 ○ van
- 4 ○ sport utility (Explorer, Blazer, Jeep, etc.)
- 5 ○ pick-up
- 6 ○ bus
- 7 ○ straight truck
- 8 ○ truck tractor
- 9 ○ other: *please specify:* _____

3. What kind of fuel does this vehicle use?

- 1 ○ gasoline
- 2 ○ diesel
- 3 ○ natural gas
- 4 ○ propane
- 5 ○ ethanol
- 6 ○ other _____ *(please specify)*

Federal Agreement

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While participation in this survey is voluntary, your co-operation is very important.

FOR INFORMATION ONLY

Please continue
on the next page.

FOR INFORMATION ONLY

Dates Not in Use

If this vehicle was not used for one or more days during the reporting period shown on the label on page 2, please provide the date(s) below.

1. Day Month
2. Day Month
3. Day Month
4. Day Month
5. Day Month
6. Day Month
7. Day Month

○ check here if this vehicle was not used for more than 7 days during the reporting period.

○ check here if this vehicle was not used at all during the reporting period.

Instructions for Completing the Log

Listed below are the instructions for completing the log. Please read them carefully and if you have any questions, contact us at the toll-free number shown on the front cover.

Please record the first 20 trips you make, using the identified vehicle, starting on the start date shown on the label on page 2. Please also record 2 fuel fill-ups or 5 partial fill-ups on pages 22 and 23.

When you have recorded 20 trips and 2 fuel fill-ups
(or 5 partial fill-ups)
OR
the reporting period shown on the label on page 2 has ended,
please mail back your completed log.

Odometer
The odometer is the instrument on the front dash or panel of your vehicle which measures the distance that your vehicle has been driven to date.

Odometer Reading - Question 2
Provide the odometer reading at the beginning and at the end of each trip to the nearest kilometre. **It is not necessary to report the tenths.**

Trip
A trip is defined as your travel from one location to another.

Report a separate trip each time:

- the driver gets in the vehicle
  OR
- any passenger gets in or out of the vehicle

FOR INFORMATION ONLY

Instructions for Completing the Log - Concluded

Trip start (origin of trip) - Question 4
Most of the places are self explanatory but a few require explanation.

Someone else's home can be the home of your passenger, the babysitter, a friend or a relative - any home other than your own.

Driver's regular workplace is the driver's usual place of work.

Another workplace should be used when you are working somewhere other than your usual workplace or driving from someone else's workplace.

School can be used to indicate either the driver's school or the passenger's school. (School should be used for students only, not for employees at the school)

Medical/dental facility includes any facility related to health, such as labs and physiotherapy centre.

Leisure/entertainment/recreational facility/restaurant is a very broad category and includes hotels, gyms, movie theatres, facilities hosting sporting activities or any place dealing with your or your passenger's leisure time.

Gas station/rest-stop should be used when you purchase fuel, make use of rest-stop facilities or stop for a break during a trip.

Driving as part of the job - Question 5
This includes service calls, sales calls, deliveries and pick ups, as well as business trips. Taxis are also in this group. If you are driving this vehicle as part of your job and if you make many stops, you can report that as one trip. Please see example 2 if you are driving as part of the job and make many stops.

Trip stop - Final destination - Question 4b, page 18
We will use the origin of one trip to determine the destination of the previous trip. In order to have the destination of your final trip, please make sure to complete the final trip on page 18.

Fuel
In order to calculate fuel consumption, it is important to have 2 fuel fill-ups (tank is full after fuel purchase). If you do not fill up the tank twice during the reporting period, please record 5 fuel purchases.

If you purchase fuel, please record the purchase on pages 22 and 23.

Comments about the log

_____

_____

_____

_____

_____

FOR INFORMATION ONLY

Note:

Flip out this page.

It has the written description for two examples.

FOR INFORMATION ONLY

Examples for Completing the Log

The completed trips, for these examples, are on pages 6 and 7.

Example 1 – Travel to work with stops and a change of passenger

John is a male driver who is 36 years old. On September 8, John and his wife, Mary (who is 32 years old), leave their home at 7:05 a.m. to go to work **(he should enter 1 passenger in the box beside age group 25 to 34 in Question 3)**.

On the way, they stop to fill up the car with $34.96 of gas and pick up coffee. John then stops to drop Mary off at her office and arrives at his work at 7:55 a.m.

The odometer read 74,836 kilometres when they left home; 74,842 when they stopped for fuel; 74,851 when John dropped Mary off and 74,861 kilometres when John arrived at work.

They drove 7 kilometres on roads with posted speed limits of 80 km/h or more between when they stopped for coffee and when John dropped Mary off.

This would be considered as three trips: home to gas station, gas station to Mary's office and Mary's office to John's office. The completed trips for this example are on pages 6 and 7. The completed fuel purchase information is on pages 22 and 23.

Example 2 – Many stops while driving as part of the job

On July 8, Sam, a 25-year-old deliveryman, drives to work using his own car. Then he drives a delivery van, which is the vehicle chosen for the survey.

When he gets in his delivery van at 7:30 a.m., the odometer reading is 82,456 kilometres. During the day, he delivers bakery products to many stores within the city.

At 4:00 p.m., he returns to the bakery, and then takes his car home. The odometer of the delivery van at the end of the day reads 82,570 kilometres.

The driving Sam did using the van can be reported as one trip since he made many stops throughout the day AS PART OF HIS JOB. Sam does not report his trip to and from his workplace since he was not driving the vehicle chosen for the survey. The completed trip for this example is on page 7.

FOR INFORMATION ONLY

For a written description of these examples please see the "flip-out" page.

Example 1 - Trip 1	Example 1 - Trip 2
1. **Date / Time trip started:** date 08 09 (dd mm) 07:05 — ◉ a.m. ○ p.m. ○ 24hr	1. **Date / Time trip started:** date 08 09 (dd mm) 07:20 — ◉ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:** 7 4 8 3 6 1/10 — ◉ km ○ miles	2. **Odometer reading at start:** 7 4 8 4 2 1/10
3. **Number of passengers (*excluding driver*) in each age group.** *Check "none" if there are no passengers.* None ○	3. **Number of passengers (*excluding driver*) in each age group.** *Check "none" if there are no passengers.* None ○
Under 5 years ☐ — 35 to 54 years ☐	Under 5 years ☐ — 35 to 54 years ☐
5 to 14 years ☐ — 55 to 64 years ☐	5 to 14 years ☐ — 55 to 64 years ☐
15 to 19 years ☐ — 65 to 74 years ☐	15 to 19 years ☐ — 65 to 74 years ☐
20 to 24 years ☐ — 75 to 84 years ☐	20 to 24 years ☐ — 75 to 84 years ☐
25 to 34 years 1 — 85 years and over ☐	25 to 34 years 1 — 85 years and over ☐
4. **Where did this trip start?** *(check one place only)*	4. **Where did this trip start?** *(check one place only)*
1 ◉ Driver's home	1 ○ Driver's home
2 ○ Someone else's home	2 ○ Someone else's home
3 ○ Driver's regular workplace	3 ○ Driver's regular workplace
4 ○ Another workplace	4 ○ Another workplace
5 ○ School/day care	5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business	6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility	7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant	8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop	9 ◉ Gas station/rest-stop
10 ○ Other *(please specify)*	10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job?** (example: deliveries, service calls) ○ Yes ◉ No	5. **Was this trip part of the driver's job?** (example: deliveries, service calls) ○ Yes ◉ No
6. **Date / Time trip ended:** date 08 09 (dd mm) 07:15 — ◉ a.m. ○ p.m. ○ 24hr	6. **Date / Time trip ended:** date 08 09 (dd mm) 07:30 — ◉ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:** 7 4 8 4 2 1/10 — ◉ km ○ miles	7. **Odometer reading at end:** 7 4 8 5 1 1/10
8. **Driver's sex** ◉ Male ○ Female	8. **Driver's sex** ◉ Male ○ Female
9. **Driver's age group** 1 ○ under 20 years; 2 ○ 20 to 24 years; 3 ○ 25 to 34 years; 4 ◉ 35 to 44 years; 5 ○ 45 to 54 years; 6 ○ 55 to 64 years; 7 ○ 65 to 74 years; 8 ○ 75 to 84 years; 9 ○ 85 years and over	9. **Driver's age group** 1 ○ under 20 years; 2 ○ 20 to 24 years; 3 ○ 25 to 34 years; 4 ◉ 35 to 44 years; 5 ○ 45 to 54 years; 6 ○ 55 to 64 years; 7 ○ 65 to 74 years; 8 ○ 75 to 84 years; 9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** ○ Yes ◉ No — If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 — ○ km ○ miles	10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** ◉ Yes ○ No — If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 7 1/10 — ◉ km ○ miles
11. **Did you purchase fuel during this trip?** ◉ Yes, record purchase on page 22 ○ No	11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22 ◉ No

FOR INFORMATION ONLY

Example 1 - Trip 3	Example 2
1. **Date / Time trip started:** date 08 09 (dd mm) 07:30 ☒ a.m. ○ p.m. ○ 24hr	1. **Date / Time trip started:** date 08 07 (dd mm) 07:30 ☒ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:** 7 4 8 5 1 (1/10) ☒ km ○ miles	2. **Odometer reading at start:** 8 2 4 5 6 (1/10) ☒ km ○ miles
3. **Number of passengers (*excluding driver*) in each age group.** Check "none" if there are no passengers. None ☒ Under 5 years ☐ — 35 to 54 years ☐ 5 to 14 years ☐ — 55 to 64 years ☐ 15 to 19 years ☐ — 65 to 74 years ☐ 20 to 24 years ☐ — 75 to 84 years ☐ 25 to 34 years ☐ — 85 years and over ☐	3. **Number of passengers (*excluding driver*) in each age group.** Check "none" if there are no passengers. None ☒ Under 5 years ☐ — 35 to 54 years ☐ 5 to 14 years ☐ — 55 to 64 years ☐ 15 to 19 years ☐ — 65 to 74 years ☐ 20 to 24 years ☐ — 75 to 84 years ☐ 25 to 34 years ☐ — 85 years and over ☐
4. **Where did this trip start?** (Check one place only) 1 ○ Driver's home 2 ○ Someone else's home 3 ○ Driver's regular workplace 4 ☒ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest stop 10 ○ Other (please specify)	4. **Where did this trip start?** (Check one place only) 1 ○ Driver's home 2 ○ Someone else's home 3 ☒ Driver's regular workplace 4 ○ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest-stop 10 ○ Other (please specify)
5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ○ Yes ☒ No	5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ☒ Yes ○ No
6. **Date / Time trip ended:** date 08 09 (dd mm) 07:55 ☒ a.m. ○ p.m. ○ 24hr	6. **Date / Time trip ended:** date 08 07 (dd mm) 04:00 ○ a.m. ☒ p.m. ○ 24hr
7. **Odometer reading at end:** 7 4 8 6 1 (1/10) ☒ km ○ miles	7. **Odometer reading at end:** 8 2 5 7 0 (1/10) ☒ km ○ miles
8. **Driver's sex** ☒ Male ○ Female	8. **Driver's sex** ☒ Male ○ Female
9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ☒ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over	9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ☒ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ☒ If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? (1/10) ○ km ○ miles	10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ☒ If yes, what was the estimated distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? (1/10) ○ km ○ miles
11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22 ☒ No	11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22 ☒ No

FOR INFORMATION ONLY

Flip out this page
for quick reference.

FOR INFORMATION ONLY

Please remember ...

Beginning with the date on the label on page 2 of this log - please complete the trip portion of the log for 20 trips and the fuel portion of the log for two fill-ups or five partial fill-ups.

What if this vehicle isn't used much - or at all?

This survey wants to measure how much Canadians are using **or not using** their vehicles.

For our studies - a vehicle not in use is just as important as one that is.

Days that the vehicle is **not in use** should be recorded on **page 4.**

Please mail back this log if you **no longer** own this vehicle.

All kilometres or miles travelled until the final trip on page 18 or the stop date, whichever comes first, should be accounted for.

A **new** trip should be started each time

1. The driver gets in the vehicle or
2. Any passenger gets in or out of the vehicle

For **examples** of different trip situations, please see pages 6 and 7.

Q11. Any fuel purchases?

Please record fuel purchases on pages 22 and 23.

Mailing Instructions:

When log is completed, please remove paper strip on outer flap, fold flap and seal onto the back cover - then mail.

Thank you very much for your time and participation.

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Odometer Reading and Fuel Gauge

On the first day of the reporting period (start date) shown on the label on page 2, please record the date, the odometer reading and the fuel gauge.

Day Month

(01-31) (01-12)

Odometer

1/10

○ km
○ miles

Fuel gauge

1 ○ **full**
2 ○ 7/8 full
3 ○ **3/4 full**
4 ○ 5/8 full
5 ○ **1/2 full**
6 ○ 3/8 full
7 ○ **1/4 full**
8 ○ 1/8 full
9 ○ empty

Trip 1

1. **Date / Time trip started:**

date dd mm : ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**

1/10 ○ km ○ miles

3. **Number of passengers *(excluding driver)* in each age group.**
Check "none" if there are no passengers.

None ○

Under 5 years	35 to 54 years
5 to 14 years	55 to 64 years
15 to 19 years	65 to 74 years
20 to 24 years	75 to 84 years
25 to 34 years	85 years and over

4. **Where did this trip start?**
(please one place only)

1 ○ Driver's home
2 ○ Someone else's home
3 ○ Driver's regular workplace
4 ○ Another workplace
5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop
10 ○ Other *(please specify)* _____

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?

○ Yes ○ No

6. **Date / Time trip ended:**

date dd mm : ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**

1/10 ○ km ○ miles

8. **Driver's sex**

○ Male ○ Female

9. **Driver's age group**

1 ○ under 20 years
2 ○ 20 to 24 years
3 ○ 25 to 34 years
4 ○ 35 to 44 years
5 ○ 45 to 54 years
6 ○ 55 to 64 years
7 ○ 65 to 74 years
8 ○ 75 to 84 years
9 ○ 85 years and over

10. **Did you travel on any roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?**

Yes ○ No ○

If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?

1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**

○ Yes, record purchase on page 22
○ No

FOR INFORMATION ONLY

Trip 2

1. **Date / Time trip started:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers
   None ○
   Under 5 years [ ] — 35 to 54 years [ ]
   5 to 14 years [ ] — 55 to 64 years [ ]
   15 to 19 years [ ] — 65 to 74 years [ ]
   20 to 24 years [ ] — 75 to 84 years [ ]
   25 to 34 years [ ] — 85 years and over [ ]
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years — 6 ○ 55 to 64 years
   2 ○ 20 to 24 years — 7 ○ 65 to 74 years
   3 ○ 25 to 34 years — 8 ○ 75 to 84 years
   4 ○ 35 to 44 years — 9 ○ 85 years and over
   5 ○ 45 to 54 years
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22
    ○ No

Trip 3

1. **Date / Time trip started:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers
   None ○
   Under 5 years [ ] — 35 to 54 years [ ]
   5 to 14 years [ ] — 55 to 64 years [ ]
   15 to 19 years [ ] — 65 to 74 years [ ]
   20 to 24 years [ ] — 75 to 84 years [ ]
   25 to 34 years [ ] — 85 years and over [ ]
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years — 6 ○ 55 to 64 years
   2 ○ 20 to 24 years — 7 ○ 65 to 74 years
   3 ○ 25 to 34 years — 8 ○ 75 to 84 years
   4 ○ 35 to 44 years — 9 ○ 85 years and over
   5 ○ 45 to 54 years
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22
    ○ No

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Trip 4	Trip 5
1. **Date / Time trip started:** date dd mm : ○ a.m. ○ p.m. ○ 24hr	1. **Date / Time trip started:** date dd mm : ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:** 1/10	2. **Odometer reading at start:** 1/10
3. **Number of passengers *(excluding driver)* in each age group.** *Check "none" if there are no passengers.* None ○ Under 5 years ☐ 5 to 14 years ☐ 15 to 19 years ☐ 20 to 24 years ☐ 25 to 34 years ☐ 35 to 54 years ☐ 55 to 64 years ☐ 65 to 74 years ☐ 75 to 84 years ☐ 85 years and over ☐	3. **Number of passengers *(excluding driver)* in each age group.** *Check "none" if there are no passengers.* None ○ Under 5 years ☐ 5 to 14 years ☐ 15 to 19 years ☐ 20 to 24 years ☐ 25 to 34 years ☐ 35 to 54 years ☐ 55 to 64 years ☐ 65 to 74 years ☐ 75 to 84 years ☐ 85 years and over ☐
4. **Where did this trip start?** *(check one place only)* 1 ○ Driver's home 2 ○ Someone else's home 3 ○ Driver's regular workplace 4 ○ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest-stop 10 ○ Other *(please specify)*	4. **Where did this trip start?** *(check one place only)* 1 ○ Driver's home 2 ○ Someone else's home 3 ○ Driver's regular workplace 4 ○ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest-stop 10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ○ Yes ○ No	5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ○ Yes ○ No
6. **Date / Time trip ended:** date dd mm : ○ a.m. ○ p.m. ○ 24hr	6. **Date / Time trip ended:** date dd mm : ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:** 1/10	7. **Odometer reading at end:** 1/10
8. **Driver's sex** ○ Male ○ Female	8. **Driver's sex** ○ Male ○ Female
9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over	9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ○ If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ○ If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22. ○ No	11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22. ○ No

FOR INFORMATION ONLY

Trip 6

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ] 1/10

3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○

Under 5 years	☐	35 to 54 years	☐
5 to 14 years	☐	55 to 64 years	☐
15 to 19 years	☐	65 to 74 years	☐
20 to 24 years	☐	75 to 84 years	☐
25 to 34 years	☐	85 years and over	☐

4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest stop
   10 ○ Other *(please specify)*

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No

6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ] 1/10

8. **Driver's sex**
   ○ Male ○ Female

9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over

10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

Trip 7

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ] 1/10

3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○

Under 5 years	☐	35 to 54 years	☐
5 to 14 years	☐	55 to 64 years	☐
15 to 19 years	☐	65 to 74 years	☐
20 to 24 years	☐	75 to 84 years	☐
25 to 34 years	☐	85 years and over	☐

4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest stop
   10 ○ Other *(please specify)*

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No

6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ] 1/10

8. **Driver's sex**
   ○ Male ○ Female

9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over

10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Trip 8

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers *(excluding driver)* in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years ☐ — 35 to 54 years ☐
   5 to 14 years ☐ — 55 to 64 years ☐
   15 to 19 years ☐ — 65 to 74 years ☐
   20 to 24 years ☐ — 75 to 84 years ☐
   25 to 34 years ☐ — 85 years and over ☐
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

Trip 9

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers *(excluding driver)* in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years ☐ — 35 to 54 years ☐
   5 to 14 years ☐ — 55 to 64 years ☐
   15 to 19 years ☐ — 65 to 74 years ☐
   20 to 24 years ☐ — 75 to 84 years ☐
   25 to 34 years ☐ — 85 years and over ☐
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

FOR INTERNET USE ONLY

Trip 10

1. **Date / Time trip started:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years [ ] 35 to 54 years [ ]
   5 to 14 years [ ] 55 to 64 years [ ]
   15 to 19 years [ ] 65 to 74 years [ ]
   20 to 24 years [ ] 75 to 84 years [ ]
   25 to 34 years [ ] 85 years and over [ ]
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

Trip 11

1. **Date / Time trip started:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years [ ] 35 to 54 years [ ]
   5 to 14 years [ ] 55 to 64 years [ ]
   15 to 19 years [ ] 65 to 74 years [ ]
   20 to 24 years [ ] 75 to 84 years [ ]
   25 to 34 years [ ] 85 years and over [ ]
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
   dd mm
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Trip 12

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years ☐ | 35 to 54 years ☐
   5 to 14 years ☐ | 55 to 64 years ☐
   15 to 19 years ☐ | 65 to 74 years ☐
   20 to 24 years ☐ | 75 to 84 years ☐
   25 to 34 years ☐ | 85 years and over ☐
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

Trip 13

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○
   Under 5 years ☐ | 35 to 54 years ☐
   5 to 14 years ☐ | 55 to 64 years ☐
   15 to 19 years ☐ | 65 to 74 years ☐
   20 to 24 years ☐ | 75 to 84 years ☐
   25 to 34 years ☐ | 85 years and over ☐
4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

FOR INFORMATION ONLY

Trip 14

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○

Under 5 years	☐	35 to 54 years	☐
5 to 14 years	☐	55 to 64 years	☐
15 to 19 years	☐	65 to 74 years	☐
20 to 24 years	☐	75 to 84 years	☐
25 to 34 years	☐	85 years and over	☐

4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

Trip 15

1. **Date / Time trip started:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
3. **Number of passengers (*excluding driver*) in each age group.**
   Check "none" if there are no passengers.
   None ○

Under 5 years	☐	35 to 54 years	☐
5 to 14 years	☐	55 to 64 years	☐
15 to 19 years	☐	65 to 74 years	☐
20 to 24 years	☐	75 to 84 years	☐
25 to 34 years	☐	85 years and over	☐

4. **Where did this trip start?**
   (check one place only)
   1 ○ Driver's home
   2 ○ Someone else's home
   3 ○ Driver's regular workplace
   4 ○ Another workplace
   5 ○ School/day care
   6 ○ Shopping centre/bank/other place of personal business
   7 ○ Medical/dental facility
   8 ○ Leisure/entertainment/ recreational facility/restaurant
   9 ○ Gas station/rest-stop
   10 ○ Other *(please specify)* _____
5. **Was this trip part of the driver's job** (example: deliveries, service calls)?
   ○ Yes ○ No
6. **Date / Time trip ended:**
   date [ ][ ] dd [ ][ ] mm [ ][ ] : [ ][ ] ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:**
   [ ][ ][ ][ ][ ][ ][ ] 1/10
8. **Driver's sex**
   ○ Male ○ Female
9. **Driver's age group**
   1 ○ under 20 years
   2 ○ 20 to 24 years
   3 ○ 25 to 34 years
   4 ○ 35 to 44 years
   5 ○ 45 to 54 years
   6 ○ 55 to 64 years
   7 ○ 65 to 74 years
   8 ○ 75 to 84 years
   9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**
    Yes ○ No ○
    If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?
    [ ][ ][ ] 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?**
    ○ Yes, record purchase on page 22.
    ○ No

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Trip 16	Trip 17
1. **Date / Time trip started:** date dd mm : ○ a.m. ○ p.m. ○ 24hr	1. **Date / Time trip started:** date dd mm : ○ a.m. ○ p.m. ○ 24hr
2. **Odometer reading at start:** 1/10	2. **Odometer reading at start:** 1/10
3. **Number of passengers *(excluding driver)* in each age group.** *Check "none" if there are no passengers.* None ○ Under 5 years ☐ 5 to 14 years ☐ 15 to 19 years ☐ 20 to 24 years ☐ 25 to 34 years ☐ 35 to 54 years ☐ 55 to 64 years ☐ 65 to 74 years ☐ 75 to 84 years ☐ 85 years and over ☐	3. **Number of passengers *(excluding driver)* in each age group.** *Check "none" if there are no passengers.* None ○ Under 5 years ☐ 5 to 14 years ☐ 15 to 19 years ☐ 20 to 24 years ☐ 25 to 34 years ☐ 35 to 54 years ☐ 55 to 64 years ☐ 65 to 74 years ☐ 75 to 84 years ☐ 85 years and over ☐
4. **Where did this trip start?** *(check one place only)* 1 ○ Driver's home 2 ○ Someone else's home 3 ○ Driver's regular workplace 4 ○ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest-stop 10 ○ Other *(please specify)*	4. **Where did this trip start?** *(check one place only)* 1 ○ Driver's home 2 ○ Someone else's home 3 ○ Driver's regular workplace 4 ○ Another workplace 5 ○ School/day care 6 ○ Shopping centre/bank/other place of personal business 7 ○ Medical/dental facility 8 ○ Leisure/entertainment/ recreational facility/restaurant 9 ○ Gas station/rest-stop 10 ○ Other *(please specify)*
5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ○ Yes ○ No	5. **Was this trip part of the driver's job** (example: deliveries, service calls)? ○ Yes ○ No
6. **Date / Time trip ended:** date dd mm : ○ a.m. ○ p.m. ○ 24hr	6. **Date / Time trip ended:** date dd mm : ○ a.m. ○ p.m. ○ 24hr
7. **Odometer reading at end:** 1/10	7. **Odometer reading at end:** 1/10
8. **Driver's sex** ○ Male ○ Female	8. **Driver's sex** ○ Male ○ Female
9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over	9. **Driver's age group** 1 ○ under 20 years 2 ○ 20 to 24 years 3 ○ 25 to 34 years 4 ○ 35 to 44 years 5 ○ 45 to 54 years 6 ○ 55 to 64 years 7 ○ 65 to 74 years 8 ○ 75 to 84 years 9 ○ 85 years and over
10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ○ If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles	10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?** Yes ○ No ○ If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip? 1/10 ○ km ○ miles
11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22. ○ No	11. **Did you purchase fuel during this trip?** ○ Yes, record purchase on page 22. ○ No

FOR INFORMATION ONLY

Trip 18

1. **Date / Time trip started:**

date ____ ____ (dd mm) : ____ ____ ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**

____ ____ ____ ____ ____ ____ ____ 1/10

3. **Number of passengers (*excluding driver*) in each age group.**
Check "none" if there are no passengers

None ○

Under 5 years ☐	35 to 54 years ☐
5 to 14 years ☐	55 to 64 years ☐
15 to 19 years ☐	65 to 74 years ☐
20 to 24 years ☐	75 to 84 years ☐
25 to 34 years ☐	85 years and over ☐

4. **Where did this trip start?**
(check one place only)

1 ○ Driver's home
2 ○ Someone else's home
3 ○ Driver's regular workplace
4 ○ Another workplace
5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop
10 ○ Other *(please specify)* _____

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?

○ Yes ○ No

6. **Date / Time trip ended:**

date ____ ____ (dd mm) : ____ ____ ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**

____ ____ ____ ____ ____ ____ ____ 1/10

8. **Driver's sex**

○ Male ○ Female

9. **Driver's age group**

1 ○ under 20 years
2 ○ 20 to 24 years
3 ○ 25 to 34 years
4 ○ 35 to 44 years
5 ○ 45 to 54 years
6 ○ 55 to 64 years
7 ○ 65 to 74 years
8 ○ 75 to 84 years
9 ○ 85 years and over

10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**

Yes ○ No ○

If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?

____ ____ 1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**

○ Yes, record purchase on page 22.
○ No

Trip 19

1. **Date / Time trip started:**

date ____ ____ (dd mm) : ____ ____ ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**

____ ____ ____ ____ ____ ____ ____ 1/10

3. **Number of passengers (*excluding driver*) in each age group.**
Check "none" if there are no passengers

None ○

Under 5 years ☐	35 to 54 years ☐
5 to 14 years ☐	55 to 64 years ☐
15 to 19 years ☐	65 to 74 years ☐
20 to 24 years ☐	75 to 84 years ☐
25 to 34 years ☐	85 years and over ☐

4. **Where did this trip start?**
(check one place only)

1 ○ Driver's home
2 ○ Someone else's home
3 ○ Driver's regular workplace
4 ○ Another workplace
5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop
10 ○ Other *(please specify)* _____

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?

○ Yes ○ No

6. **Date / Time trip ended:**

date ____ ____ (dd mm) : ____ ____ ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**

____ ____ ____ ____ ____ ____ ____ 1/10

8. **Driver's sex**

○ Male ○ Female

9. **Driver's age group**

1 ○ under 20 years
2 ○ 20 to 24 years
3 ○ 25 to 34 years
4 ○ 35 to 44 years
5 ○ 45 to 54 years
6 ○ 55 to 64 years
7 ○ 65 to 74 years
8 ○ 75 to 84 years
9 ○ 85 years and over

10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**

Yes ○ No ○

If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?

____ ____ 1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**

○ Yes, record purchase on page 22.
○ No

FOR INFORMATION ONLY

Questions? Please see instructions on page 4 and examples on pages 6 and 7.

Final Trip

1. **Date / Time trip started:**

date ____ ____ (dd mm) : ____ ○ a.m. ○ p.m. ○ 24hr

2. **Odometer reading at start:**

____ ____ ____ ____ ____ ____ ____ ____ 1/10

3. **Number of passengers (*excluding driver*) in each age group.**

Check "none" if there are no passengers.

None ○

Under 5 years	☐	35 to 54 years	☐
5 to 14 years	☐	55 to 64 years	☐
15 to 19 years	☐	65 to 74 years	☐
20 to 24 years	☐	75 to 84 years	☐
25 to 34 years	☐	85 years and over	☐

4a. **Where did this trip start?**

(check one place only)

1 ○ Driver's home
2 ○ Someone else's home
3 ○ Driver's regular workplace
4 ○ Another workplace
5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop
10 ○ Other *(please specify)* _____

4b. **Where did this trip end?**

(check one place only)

1 ○ Driver's home
2 ○ Someone else's home
3 ○ Driver's regular workplace
4 ○ Another workplace
5 ○ School/day care
6 ○ Shopping centre/bank/other place of personal business
7 ○ Medical/dental facility
8 ○ Leisure/entertainment/ recreational facility/restaurant
9 ○ Gas station/rest-stop
10 ○ Other *(please specify)* _____

5. **Was this trip part of the driver's job** (example: deliveries, service calls)?

○ Yes ○ No

6. **Date / Time trip ended:**

date ____ ____ (dd mm) : ____ ○ a.m. ○ p.m. ○ 24hr

7. **Odometer reading at end:**

____ ____ ____ ____ ____ ____ ____ ____ 1/10

8. **Driver's sex**

○ Male ○ Female

9. **Driver's age group**

1 ○ under 20 years
2 ○ 20 to 24 years
3 ○ 25 to 34 years
4 ○ 35 to 44 years
5 ○ 45 to 54 years
6 ○ 55 to 64 years
7 ○ 65 to 74 years
8 ○ 75 to 84 years
9 ○ 85 years and over

10. **Did you travel on any roads with *posted* speeds of 80 km/h (50 m.p.h.) or more during this trip?**

Yes ○ No ○

If yes, what was the *estimated* distance travelled on roads with posted speeds of 80 km/h (50 m.p.h.) or more during this trip?

____ ____ 1/10 ○ km ○ miles

11. **Did you purchase fuel during this trip?**

○ Yes, record purchase on page 22.
○ No

FOR INFORMATION ONLY

Record your fuel purchases on pages 22 and 23.

FOR INFORMATION ONLY

Detailed Information For Your Interest

Purpose of the survey

It is the goal of this survey to provide quarterly and annual estimates of vehicle usage and fuel consumption. Transport Canada and Natural Resources Canada sponsor the survey and use the information in conjunction with other data to monitor how vehicle use changes over time and how use affects safety, fuel consumption and the environment. The results are also the prime source of road vehicle use information for researchers and interested members of the public. Prior to this survey, there was no valid, comprehensive source for this information in Canada, even though about ninety percent of all travel in Canada is by road.

Why this vehicle was chosen

Your vehicle was one of those that was selected in your province/territory so that we can find out how you use it over the stated time period. To save money, we are keeping the number of vehicles sampled to a minimum, so it is important that we get your response. Your response is not analysed in any way that identifies you or your vehicle - it is only useful to us when combined with all the other responses. We get a representative picture by picking vehicles at random from the official vehicle registration files, in order to cover the entire country and all types of vehicles, and we cover the whole year by picking new ones every week. Once the completed forms are returned, we combine them to obtain the total distance driven.

The profile created from the sample includes the total distance driven for each day of the week, and each hour within the day, by sex and age group of drivers, by trip purpose, and by highways and other roads.

The recorded number of passengers for each trip is used to calculate vehicle occupancy, which is multiplied by the distance driven to give the total passenger kilometres of travel in a year. Passenger-kilometres is the main measure used to compare travel by different means of transport - for example the extent of car travel versus travel by plane, train, intercity bus or urban transit.

How we use each question

Odometer readings are the most important of all, allowing us to know the kilometres travelled each trip and the total travelled by the vehicle during the survey days. These are essential to calculate the amount of travel in the country each year.

Date and time of departure and arrival, tell us when trips start and finish, so we can show, for example, how much travel is on weekdays compared to weekends, in the morning and evening rush-hours compared to the middle of the day, or in the middle of the night. These data can be used to show how staggered working hours are spreading the peaks, whether Sunday shopping is shifting traffic from weekdays, whether changes in night-time accidents involving alcohol are partly due to changes in night-time traffic and so on. These questions also give us the trip duration in hours and minutes, which helps us determine how much of total travel is made up of very short local trips and how much of long intercity trips.

FOR INFORMATION

Detailed Information For Your Interest

Number of passengers carried lets us calculate vehicle occupancy. The details of passengers by age group are primarily for safety analyses. By multiplying the number of passengers carried by the distance we produce passenger-kilometres, the best indicator of the extent of personal travel, and its breakdown by time of day, trip purpose, etc. This information allows for comparisons of car travel to travel by public transport - showing for instance, how the share of total long-distance travel by plane is rising, while shares by train and intercity bus are declining; or how the share of short-distance travel by public transit is declining. Average occupancies by type of vehicle, trip purpose and time of day are very important for measuring trends in congestion, fuel consumption and vehicle emissions.

Trip start and end place tell us why you are travelling by road, useful information for those who are involved with planning urban land use, public transit and air, bus and rail services. The answers let us know, whether leisure travel is growing faster than commuting, or whether people are travelling longer distances to do their shopping.

The driver information is asked to provide the driver's sex and age group, particularly for computation of accident rates by each group. The age categories listed are those normally used by safety agencies in compiling accident reports, so the estimates of kilometres traveled by age group can be combined with records of accident involvement to give accidents per vehicle-kilometre.

Type of road attempts to distinguish between travel on urban streets, and that on highways or in rural conditions. We are attempting to do this by asking you how much of each trip is on roads with posted speed limits of 80 km/h or more, which we will use as an approximation of highway or rural conditions. This is an important distinction since safety, fuel consumption and emissions differ greatly between urban streets, and highways or rural conditions. But it is a difficult distinction to make, because people often don't know whether they are in an urban or a rural area, or whether the road they are on is classified as a street or a highway. The clearest difference that most people are aware of is the speed limit. Of course, we realise many drivers will not know exactly how many kilometres they drive on roads with posted speed limits of 80 km/h or more during a trip, so we expect only the best approximate answer the driver is able to provide.

Fuel purchases asks if any fuel was purchased during the trip. The answers will be used to calculate fuel consumption in order to monitor trends in fuel use. The best way to calculate the fuel consumption is to have the odometer reading and amount of fuel purchased for **2 fill-ups** (fuel tank is full after the fuel purchase). So, if possible, please provide information for **2 fill-ups** on the following pages. Without 2 fill-ups, it is possible to estimate fuel consumption by knowing the odometer reading and quantity of fuel purchased on several occasions, which is why we ask for 5 partial fill-ups if you are unable to provide 2 fill-ups.

FOR INFORMATION ONLY

Fuel Purchases

	Enter date of fuel purchase	Enter odometer reading at time of purchase	Type of Fuel Code 1 - regular gasoline 2 - mid-grade gasoline 3 - premium gasoline 4 - ethanol blended gasoline 5 - diesel 6 - natural gas 7 - propane 8 - ethanol 9 - other
EXAMPLE	Day Month 0 8 0 9 (01-31) (01-12)	Odometer 7 4 8 4 2 1/10 ⊘ kilometres ○ miles	Enter code 1
1	Day Month (01-31) (01-12)	Odometer 1/10 ○ kilometres ○ miles	Enter code
2	Day Month (01-31) (01-12)	Odometer 1/10	Enter code
3	Day Month (01-31) (01-12)	Odometer 1/10	Enter code
4	Day Month (01-31) (01-12)	Odometer 1/10	Enter code
5	Day Month (01-31) (01-12)	Odometer 1/10	Enter code

Odometer Reading and Fuel Gauge

Please record the date, odometer reading and fuel gauge before returning the questionnaire.

Day Month	Odometer	Fuel Gauge
(01-31) (01-12)	1/10	1 ○ full 2 ○ 7/8 full 3 ○ 3/4 full 4 ○ 5/8 full 5 ○ 1/2 full 6 ○ 3/8 full 7 ○ 1/4 full 8 ○ 1/8 full 9 ○ empty

FOR INFORMATION ONLY

Fuel Purchases

Enter quantity purchased	Enter amount spent	Price per litre/gallon	Fill-up indicator
32.4 (✓) litres ( ) US gallons ( ) other	$ 34.96	107.9 ¢	Was the fuel tank full after this purchase? (✓) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no
. ( ) litres ( ) US gallons ( ) other	$.	. ¢	Was the fuel tank full after this purchase? ( ) yes ( ) no

Thank you very much for your participation

FOR INFORMATION ONLY

Canadian Vehicle Survey **Enquête sur les véhicules au Canada**

T1

Confidential when completed
Confidentiel une fois rempli

While participation in this survey is voluntary, your cooperation is very important.

Collected under the authority of the *Statistics Act*, Revised Statutes of Canada, Chapter S19.

Bien que votre participation à cette enquête soit volontaire, votre coopération est très importante.

Renseignements recueillis en vertu de la *Loi sur la statistique*, Loi révisées du Canada, 1985, chapitre S19.

Federal Agreement

To avoid duplication in surveys and to provide consistent statistics, Statistics Canada has entered into an agreement under section 12 of the *Statistics Act* with Transport Canada and Natural Resources Canada for the sharing of information from this survey. Under section 12 of the *Statistics Act*, you may refuse to share your information with Transport Canada or Natural Resources Canada by writing to the Chief Statistician and returning your letter of objection along with the completed questionnaire.

Accord fédéral

Afin d'éviter le chevauchement des enquêtes et obtenir des données statistiques cohérentes, Statistique Canada a conclu un accord d'échange de renseignements aux termes de l'article 12 de la *Loi sur la statistique*, avec Transports Canada et Ressources naturelles Canada. En vertu de l'article 12 de la *Loi sur la statistique*, vous pouvez refuser de partager vos renseignements avec Transports Canada ou Ressources naturelles Canada en écrivant au statisticien en chef une lettre d'opposition que vous retournerez.

Continue on reverse
Suite au verso ➜

5-5403-97, 2008-11-19 STC/TRA-400-75103 SQC/TRA-400-75103

Statistics Canada Statistique Canada

Canada

POUR INFORMATION SEULEMENT

1. **Do you still own/lease the vehicle described on the other side?**
(Check where applicable and record the date in the box provided)
Est-ce que vous possédez/louez encore le véhicule mentionné au verso ?
(Cocher l'option appropriée et indiquez la date)

○ Yes / Oui → **Go to Question 2. / Passez à la question 2.**

○ No / Non → **Was this vehicle . . . / Ce véhicule a-t-il été . . .**

○ sold? / vendu ? ○ scrapped? / mis hors service ? ○ returned (end of lease)? / retourné (fin de bail) ?

○ Other (Specify) / Autre (Précisez) _____

When? / Quand? Day - Jour ☐☐ Month - Mois ☐☐ Year - Année ☐☐☐☐

Note: ***If your answer is "No", please stop at this point and mail back this questionnaire.***
À noter : ***Si vous avez répondu « Non », veuillez terminer ici et retourner ce questionnaire par la poste.***

2. **If you still own/lease this vehicle, please record the vehicle's odometer reading on January 1, 2009.**
Si vous possédez / louez encore ce véhicule, veuillez inscrire le kilométrage indiqué par l'odomètre le 1er janvier 2009.

Odometer reading at start of day on January 1, 2009
Lecture de l'odomètre au début de la journée du 1er janvier 2009

☐☐☐☐☐☐ 1/10 ○ Kilometres / Kilomètres **OR** ○ Miles / Milles

3. **Which of the following best describes this vehicle?**
Laquelle des catégories suivantes décrit le mieux ce véhicule ?

○ Car / Voiture
○ Station wagon / Familiale de type « station wagon »
○ Van / Fourgonnette de type « van »
○ Sport utility (Bronco, Blazer, Jeep Pathfinder) / Véhicule de sport (Bronco, Blazer, Jeep Pathfinder)
○ Pick-up / Camionnette de type « pick-up »
○ Bus / Autobus
○ Straight truck / Camion porteur
○ Truck tractor / Tracteur
○ Other (specify) / Autre (précisez) _____

4. **What type of fuel does this vehicle use?**
Quel type de carburant ce véhicule utilise-t-il?

○ Gasoline / Essence
○ Diesel
○ Natural gas / Gaz naturel
○ Propane
○ Ethanol / Éthanol
○ Other (specify) / Autre (précisez) _____

Thank you for your help - Merci de votre collaboration

FOR INFORMATION ONLY - POUR INFORMATION SEULEMENT

Canadian Vehicle Survey **Enquête sur les véhicules au Canada**

T2

Confidential when completed
Confidentiel une fois rempli

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POUR INFORMATION SEULEMENT

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Continue on reverse
Suite au verso →

5.5403.95. 2008-11-19 STC/TRA-400-75103 SQC/TRA-400-75103

Statistics Canada Statistique Canada

Canada

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When? / Quand? Day - Jour ☐☐ Month - Mois ☐☐ Year - Année ☐☐☐☐

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Si vous possédez / louez encore ce véhicule, veuillez inscrire le kilométrage indiqué par l'odomètre le 1er janvier 2009.

Odometer reading at start of day on January 1, 2009
Lecture de l'odomètre au début de la journée du 1er janvier 2009

☐☐☐☐☐☐☐ 1/10 ○ Kilometres / Kilomètres **OR** ○ Miles / Milles

Thank you for your help - Merci de votre collaboration

FOR INFORMATION ONLY - POUR RENSEIGNEMENT SEULEMENT